SANDY POINT 2003 VIBRACORE LOGS

							HOLE NO. SPVC-03-0	
DRIL	LING LO	G	DIVISION:	INSTALLA	TION:		SHEET 1 of 1	
1. PROJE	ECT B.	ARA	TARIA	10. SIZE A				
2. LOCAT	LION		or Station) 855493 Y=232415		N	AVD 88		
3. DRILLII	NG AGENCY:	Ecke	erd College	12. MANUF			SIGNATION OF DRILL P-3 Electric Vibracorer	
4. HOLE N	NO. (As show	n on	drawing title and file number)	13. TOT NO. OF OVERBURDEN SAMPLES TAKEN Disturbed: 0 Undisturbed: 0				
	SPVC-03-03							
5. NAME	OF DRILLER	(Gregg Brooks, PhD	14. TOTAL NO. OF CORE BOXES 1 15. ELEVATION GROUND WATER				
6. DIRECTION OF HOLE VERTICAL				16. DATE I	(Completed 03 1052 DLE -36.1 FT	
7. THICK	NESS OF BUR	DEN	0.0 FT	-			RY FOR BORING 97%	
	I DRILLED INT DEPTH OF H			19. SIGNA	TURE OF	GEOLO	OGIST ML and JB	
ELEV.		LEGEND	CLASSIFICATION OF MATER (Description)	IALS	CORE REC %	SAMPLE	REMARKS	
-36.1	0						Sample #1 Depth = 0.6	
-37.4	1=2		CLAY (soft from 0.0'-0.6'), little laminae, trace shell hash, dark (5Y-4/1), (CL).			1	*Mean (mm): 0.010, Phi Sorting: 2.46 *Sand: 12.25%, Silt: 57.41%, Clay: 30.40%	
-42.3	2 3 4 5 6		SAND, fine grained, quartz, some (5Y-5/1), (SM).	silt, gray		2	Sample #2 Depth = 3.5 Mean (mm): 0.09, Phi Sorting: 0.59 Silt: 21.48% (SM) Sample #6 Depth = 6.5 *Mean (mm): 0.092, Phi Sorting: 0.70	
-42.9	III	\prod	SILT, little sand, gray (5Y-6/1),	(ML).		6	*Sand: 80.32%, Silt: 17.33%, Clay: 2.39%	
-47.1	7		SAND, fine grained, quartz, little s clay laminae, 1.0" clay burrow @ 1 (5Y-6/1), (SM).			3	Mean (mm): 0.08, Phi Sorting: 0.55 Silt: 42.27% (ML) Sample #3 Depth = 9.0 Mean (mm): 0.09, Phi Sorting: 0.43 Silt: 12.93% (SM)	
	12-1 13-1 13-1 14-1		SAND, fine grained, quartz, fining trace silt, trace organics, 2.0" sar layer @ 12.3', gray (5Y-6/1), (idy clay		4	Sample #4 Depth = 13.7 Mean (mm): 0.14, Phi Sorting: 0.45 Silt: 2.34% (SP)	
-54.1	15— 16— 17—			,		5	Sample #5 Depth = 17.3 Mean (mm): 0.15, Phi Sorting: 0.43 Silt: 1.61% (SP)	
-54.6	·		No Recovery		1			
	20 11 22 1 22 1 23 1 1 1 1 1 1 1 1 1 1 1 1		End of Boring Note: 1) Soils are field visually classified in accordance with the Unified Soil Classification System.				* Data Analyzed by UNO	
	24							
				PROJE	CT: BARA	ΤΔΡΙΔ	HOLE NUMBER: SPVC-03-03	

			HOLE NO. SPVC-03				11022 1101 01 10 00
DRIL	LING LOG	DIVISION:	INSTALLA	TION:			SHEET 1 of 1
1. PROJE	ECT BAR	ATARIA	10. SIZE A				
2. LOCA	(Coordinates	·	11. DATUN		EVATION NO SE		(TBM or MSL)
3 DBII 1 I		3863175 Y=222287	12. MANUFACTURER'S DESIGNATION OF DRILL				
	NG AGENCY: Ecl		Rossfelder P-3 Electric Vibracorer 13. TOT NO. OF OVERBURDEN SAMPLES TAKEN				
4. HOLE I	HOLE NO. (As shown on drawing title and file number) SPVC-03-05					isturbed: 0	
5. NAME	OF DRILLER		14. TOTAL				
6. DIREC	TION OF HOLE	Gregg Brooks, PhD	15. ELEVA 16. DATE I		Started		Completed
		VERTICAL	17. ELEVA			3 1246 DLE -34.9 F	-T
	NESS OF BURDE		18. TOTAL	CORE R	ECOVE	RY FOR BO	DRING 91%
	DRILLED INTO DEPTH OF HOL		19. SIGNA	TURE OF	GEOLO	GIST ML a	and JB
ELEV.	DEPTH DEPTH	CLASSIFICATION OF MATER (Description)	RIALS	CORE REC %	SAMPLE		REMARKS
-34.9	0 52.52.						
-38	1 2 3	SAND, fine grained, quartz, little clay, trace shell hash, dark gray ((SC).			1	*Mean (r *Sand: 6 13.23% Mean (m	#1 Depth = 1.5 mm): 0.027, Phi Sorting: 2.40 0.52%, Silt: 26.21%, Clay: mm): 1.10, Phi Sorting: 0.72 44% (SM)
-45.3	5 1 1 1 1 1 1 1 1 1	SAND, fine grained, quartz, trace clay layer @ 6.6', 2.0" light yellow (10YR-6/4) clay layer from 7.1'-7 (5Y-6/1), (SP).	sh brown		2	Mean (m Silt: 7.63 Sample Mean (m	#2 Depth = 5.5 m): 0.14, Phi Sorting: 0.65 1% (SW-SM) #3 Depth = 10.6 nm): 0.072, Phi Sorting: 0.94 2.40%, Silt: 21.79%, Clay:
-45.9	11	SILTY SAND, 0.5" organic layer	@ 8.8',		3	5.76%	nm): 0.09, Phi Sorting: 0.69
-48.2	12-11	gray (5Y-5/1), (SM). SAND, fine grained, quartz, fining trace silt, gray (5Y-5/1), (S			4	Silt: 36.6 Sample Mean (m	#4 Depth = 11.4 hm): 0.13, Phi Sorting: 0.62 % (SW-SM)
-50.5	14-	SAND, fine grained, quartz, finir upwards, trace silt, 1.0" clay burro 14.6', gray (5Y-5/1), (SP).			5		#5 Depth = 15.3 nm): 0.17, Phi Sorting: 0.44 !% (SP)
-52.1	16	No Recovery					
JZ. 1	17-	End of Boring		†			
	18 19 19 19 20 19 21 19 22 19 23 19 23 19 23 19 25 25 25 25 25 25 25 25 25 25 25 25 25	Note: 1) Soils are field visually classified in accordance with the Unified Soil Classification System				* Data A	nalyzed by UNO
	24-		PROJE	CT: BARA	TARIA		HOLE NUMBER: SPVC-03-05

								HOLE NO. SPVC-03-0	
DRIL	LING LO	G	DIVISION:	INSTALL	ATION:			SHEET 1 of 1	
1. PROJE	CT [BAR/	ATARIA	10. SIZE A					
2. LOCAT	(Coordin		or Station) 3863172 Y=222290	11. DATU		EVATION NO. 1		(TBM or MSL)	
3. DRILLII	NG AGENCY			12. MANUFACTURER'S DESIGNATION OF DRILL Rossfalder P.3 Electric Vibrancer					
4. HOLE N					Rossfelder P-3 Electric Vibracorer 13. TOT NO. OF OVERBURDEN SAMPLES TAKEN				
			SPVC-03-05A	Disturbed: 0 Undisturbed: 0					
5. NAME	OF DRILLER	ł	Gregg Brooks, PhD	14. TOTA 15. ELEV					
6. DIRECT	TION OF HOL		VERTICAL	16. DATE	HOLE	Started		Completed	
7. THICK	NESS OF BU	RDF			ATION TO	P OF HO	DLE -34.9 F		
	DRILLED IN						RY FOR BO	DRING 86%	
	DEPTH OF			15. 010147	TOKE OF	OLOLO	OIOT WIL	and ob	
ELEV.	DEPTH	LEGEND	CLASSIFICATION OF MATER (Description)	IALS	CORE REC %	SAMPLE		REMARKS	
-34.9	0								
-49.3	0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		Jetted to 14.4'			6		#6 Depth = 14.5 nm): 0.009, Phi Sorting: 2.51	
	15		SANDY CLAY, little organics, dai (5Y-4/1), (CL).			7	*Sand: 1 36.29%	3.70%, Silt: 49.95%, Clay:	
-51.2	16		SAND, fine grained, quartz, trace s clay burrow @ 15.4', gray (5Y-5/1					#7 Depth = 16.0 nm): 0.16, Phi Sorting: 0.47	
-51.5	17-		No Recovery		1		Silt: 2.49		
	18-1 19-1 20-1 21-1 22-1 23-1		End of Boring Note: 1) Soils are field visually classified in accordance with the Unified Soil Classification System.				* Data A	nalyzed by UNO	
	24-			PROJ	ECT: BARA	TARIA		HOLE NUMBER: SPVC-03-5A	

				1			HOLE NO. SPVC-03-	
	LING LOC	3	DIVISION:	INSTALLA	TION:		SHEET 1 of 1	
1. PROJE	CT B/	ARA ⁻	TARIA	10. SIZE AND TYPE OF BIT 3"				
2. LOCAT	(Coordina		·	11. DATUN			N SHOWN(TBM or MSL)	
			363029 Y=223563	12. MANUF		AVD 88 R'S DE	SIGNATION OF DRILL	
3. DRILLI	NG AGENCY:	Ecke	rd College				P-3 Electric Vibracorer	
4. HOLE	IO. (As show	n on c	drawing title and file number)	13. TOT NO. OF OVERBURDEN SAMPLES TAKEN Disturbed: 0 Undisturbed: 0				
			SPVC-03-06	Disturbed: 0 Undisturbed: 0 14. TOTAL NO. OF CORE BOXES 1				
5. NAME	OF DRILLER	G	Gregg Brooks, PhD	15. ELEVA				
6. DIRECT	TION OF HOLE	Ē	VERTICAL	16. DATE I			Completed 3_1429 DLE -34.9 FT	
7. THICK	NESS OF BUR	DEN	0.0 FT				RY FOR BORING 90%	
-	DRILLED INT			19. SIGNA	TURE OF	GEOLO	GIST ML and JB	
9. TOTAL	DEPTH OF H	OLE	18.6 F I					
ELEV.	DEPTH (LEGEND	CLASSIFICATION OF MATER (Description)	IALS	CORE REC %	SAMPLE	REMARKS	
-34.9	0 =+1	111						
-36.9	1 2		SILTY SAND, 2.0" clay layer from dark gray (5Y-4/1), (SM).			1	Sample #1 Depth = 1.0 Mean (mm): 0.11, Phi Sorting: 0.69 Silt: 18.55% (SM)	
20.4	3 		SAND, fine grained, quartz, little sandy clay layer from 3.8'-4.0', da (5Y-4/1), (SW-SM).			2	Sample #2 Depth = 3.0 Mean (mm): 0.12, Phi Sorting: 0.55 Silt: 6.75% (SW-SM)	
-39.1 -39.7	4	111	SAND, fine grained, quartz, trace	silt, gray		4		
	5 = 7	//	(5Y-5/1), (SW-SM).			3	Sample #3 Depth = 5.4 *Mean (mm): 0.007, Phi Sorting: 1.97	
-40.7	6	//	CLAY, little sandy layers, dark (5Y-4/1), (CL).	gray		Ť	*Sand: 1.48%, Silt: 65.28%, Clay: 33.26%	
-46.2	7 7 8 9 10 10 11 11		SAND, fine grained, quartz, trace organics, 3.0" clay layer from 9.9 gray (5Y-6/1), (SW-SM).	9'-10.2',		4	Sample #4 Depth = 7.0 Mean (mm): 0.16, Phi Sorting: 0.55 Silt: 4.01% (SP)	
-51.7	12 13 13 14 14 15 15 16 16 17 17 17 17 17 17 17 17 17 17 17 17 17		SAND, fine grained, quartz, trace organics, 5.0" clay layer from 11. 1.0" clay layers @ 12.7' and 13.0', layer from 13.6'-13.8', 1.0" clay be 14.7', gray (5Y-6/1), (SW-SI	4'-11.9', 2.0" clay urrow @		5	Sample #5 Depth = 15.5 Mean (mm): 0.15, Phi Sorting: 0.59 Silt: 3.85% (SW-SM)	
-53.5	18		No Recovery					
	19		End of Boring					
	20							
	1		Note:					
	21-		1) Soils are field visually				* Data Analyzed by UNO	
	22		classified in accordance with the Unified Soil Classification System.					
	23		Sidesinsalion Gyolom.					
	∄							
	24-							
				DD0.15	CT: BARA	TABLA	HOLE NUMBER: SPVC-03-06	

							HOLE NO. SPVC-03-0
DRIL	LING LOG	DIVISION:	INSTALLA	TION:			SHEET 1 of 1
1. PROJE	ECT BAR	ATARIA	10. SIZE AND TYPE OF BIT 3"				
2. LOCA	(Coordinates	•	11. DATUI				(TBM or MSL)
	X=:	3862989 Y=221283	NAVD 88 12. MANUFACTURER'S DESIGNATION OF DRILL				
3. DRILLI	NG AGENCY: Ecl		Rossfelder P-3 Electric Vibracorer 13. TOT NO. OF OVERBURDEN SAMPLES TAKEN				
4. HOLE I	NO. (As shown o	n drawing title and file number)				DEN SAMP listurbed: (
	OF DE:::==	SPVC-03-07	14. TOTAL				,
5. NAME	OF DRILLER	Gregg Brooks, PhD	15. ELEVA				
6. DIREC	TION OF HOLE	VERTICAL	16. DATE			3 1518	Completed
7. THICK	NESS OF BURDE	N 0.0 FT				DLE -35.1 F RY FOR BO	FT Dring 95%
	DRILLED INTO					GIST ML a	
9. TOTAL	DEPTH OF HOL	E 18.5 FT					
ELEV.	DEPTH	CLASSIFICATION OF MATER (Description)	RIALS	CORE REC %	SAMPLE NUMBER		REMARKS
-35.1	0 -///	CLAY, soft, dark gray (5Y-4/1)	(CL)		4		#1 Depth = 0.4
-35.9	1=111	52.11, 551, dain gray (51-4/1)	, (02).		1	*Sand: 2	mm): 0.008, Phi Sorting: 1.91 2.32%, Silt: 68.59%, Clay:
-41.1	311111111111111111111111111111111111111	SAND, fine grained, quartz, little shell hash, gray (5Y-5/1), (\$			2	Mean (m	#2 Depth = 3.0 nm): 0.12, Phi Sorting: 0.59 1% (SM)
	7				3	Mean (m	#3 Depth = 7.0 m): 0.13, Phi Sorting: 0.55 % (SW-SM)
-47.6	9	SAND, fine grained, quartz, trace clay laminae, gray (5Y-6/1), (S			4	Mean (m	#4 Depth = 10.0 m): 0.13, Phi Sorting: 0.47 3% (SW-SM)
-52.1	13 - 14 - 15 - 16 - 16 - 1	SAND, fine grained, quartz, trace clay laminae, 2.0" clay layer 12.8'-13.0', gray (5Y-6/1), (SW	rom		5		#5 Depth = 15.0 nm): 0.15, Phi Sorting: 0.41 l% (SP)
-52.7	17 7//	CLAY, little sand layers, dark gray	(5Y-4/1),		1		
-53.6	18	(CL). No Recovery		1			
	19	End of Boring					
	20-	Note: 1) Soils are field visually classified in accordance with the				* Data A	nalyzed by UNO
	23-	Unified Soil Classification System					
			PROJE	ECT: BARA	TARIA		HOLE NUMBER: SPVC-03-07

						HULE NO. SPVC-03-0
DRIL	LING LOG	DIVISION:	INSTALLA	TION:		SHEET 1 of 1
1. PROJE	ECT BAR	ATARIA	10. SIZE A			
2. LOCA	TION (Coordinates	or Station) 3862566 Y=224414	11. DATUN		EVATION NO SE	ON SHOWN (TBM or MSL) B
3. DRII I I	NG AGENCY: Eck		12. MANUFACTURER'S DESIGNATION OF DRILL Rossfelder P-3 Electric Vibracorer			
		n drawing title and file number)	Rossfelder P-3 Electric Vibracorer 13. TOT NO. OF OVERBURDEN SAMPLES TAKEN			
4. HOLE I	NU. (As shown 0	SPVC-03-09				listurbed: 0
5. NAME	OF DRILLER		14. TOTAL			
6. DIRECT	TION OF HOLE	Gregg Brooks, PhD	15. ELEVA		Started	Completed
J. DIKEO		VERTICAL			06/07/0	03 1343 DLE -34.8 FT
	NESS OF BURDE		-			RY FOR BORING 96%
	DRILLED INTO		19. SIGNAT	TURE OF	GEOLO	OGIST ML and JB
ELEV.	DEPTH DEPTH	CLASSIFICATION OF MATER (Description)	RIALS	CORE REC %	SAMPLE	REMARKS
-34.8	0					
-37.2	1 1 2 2 2	CLAY, trace sandy laminae, 2.0" s layer from 1.8'-2.0', dark gray (5Y-			1	Sample #1 Depth = 1.6 *Mean (mm): 0.006, Phi Sorting: 1.91 *Sand: 1.02%, Silt: 61.76%, Clay: 37.32%
-43.1	3 4 4 5 6 7 8 8	SAND, some silt, gray (5Y-5/1)	, (SM).		2	Sample #2 Depth = 6.5 Mean (mm): 0.09, Phi Sorting: 0.59 Silt: 16.09% (SM)
-45.6	9 10 10 10 10 10 10 10 10 10 10 10 10 10	SAND, fine grained, quartz, little s organics, gray (5Y-5/1), (SW-			3	Mean (mm): 0.12, Phi Sorting: 0.56 Silt: 6.63% (SW-SM) Sample #4 Depth = 11.2 *Mean (mm): 0.112, Phi Sorting: 0.68
-46.3	11	SAND, little silt, dark gray (5Y-4/	1), (SM).		4	*Sand: 86.69%, Silt: 10.72%, Clay: 2.48%
-49.4	13	SAND, fine grained, quartz, trace clay laminae, 1.0" clay layer @ 12 clay burrow @ 14.0', gray (5Y-(SW-SM).	2.3', 0.5"		5	Mean (mm): 0.08, Phi Sorting: 0.48 Silt: 19.97% (SM) Sample #5 Depth = 13.0 Mean (mm): 0.13, Phi Sorting: 0.70 Silt: 9.68% (SW-SM)
50.5	15	CLAY, little organic laminae, very (5Y-3/1), (CL).	dark gray		1	
-50.5 -51.1	16	CLAYEY SILT, dark gray (5Y-4/1),	(ML).		6	Sample #6 Depth = 16.0 *Mean (mm): 0.009, Phi Sorting: 2.57
-53	17	SAND, some silt, gray (5Y-5/1)	. ,		2	*Sand: 13.49%, Silt: 51.80%, Clay: 34.72%
-53.8	=	No Recovery				
55.0	20 21 22 23 23 24	End of Boring Note: 1) Soils are field visually classified in accordance with the Unified Soil Classification System.				* Data Analyzed by UNO
	24—		DDO IE	CT: BARA	TADIA	HOLE NUMBER: SPVC-03-09

						HOLE NO. SPVC-03-	
DRIL	LING LOG	DIVISION:	INSTALLA	TION:		SHEET 1 of 1	
1. PROJE	BARA	ATARIA	10. SIZE AND TYPE OF BIT 3"				
2. LOCA	(Coordinates	•	11. DATUN		EVATIO AVD 88	N SHOWN(TBM or MSL)	
3. DRILLI	X=3 NG AGENCY: Eck	8863105 Y=222927 erd College	12. MANUFACTURER'S DESIGNATION OF DRILL Rossfelder P-3 Electric Vibracorer				
4. HOLE I		drawing title and file number)	13. TOT NO. OF OVERBURDEN SAMPLES TAKEN				
	ee v	SPVC-03-10	Disturbed: 0 Undisturbed: 0 14. TOTAL NO. OF CORE BOXES 1				
5. NAME	OF DRILLER	Gregg Brooks, PhD	14. TOTAL 15. ELEVA				
6. DIREC	TION OF HOLE	VERTICAL	16. DATE I	HOLE	Started	Completed	
7. THICKI	NESS OF BURDER	N 0.0 FT		TION TO	OF HO	DLE -34.8 FT	
	I DRILLED INTO F					RY FOR BORING 93% DGIST ML and JB	
9. TOTAL	DEPTH OF HOLE	18.9 FT					
ELEV.	DEPTH PEGEND	CLASSIFICATION OF MATER (Description)	IALS	CORE REC %	SAMPLE	REMARKS	
-34.8	0 =///	CLAY, little sand, 1.0" organic laye	ar @ ∩ º'			Sample #1 Depth = 0.7	
-36	1 1//	very dark gray (5Y-3/1), (CI			1	*Mean (mm): 0.017, Phi Sorting: 2.63 *Sand: 29.99%, Silt: 49.52%, Clay:	
	2					20.50%	
	3 1				2	Sample #2 Depth = 3.0 Mean (mm): 0.11, Phi Sorting: 0.62 Silt: 9.12% (SW-SM)	
	4 TH 1 TH	SAND, fine grained, quartz, some clay burrows, trace organics, tra					
-45.8	2 3 4 5 6 7 8 9 10 11	laminae, 2.0" sandy clay layer 3.8'-4.0', color darkens towards l gray (5Y-5/1), to dark gray (5Y-4/	from oottom,		3	Sample #3 Depth = 8.0 Mean (mm): 0.15, Phi Sorting: 0.67 Silt: 5.78% (SW-SM)	
-51.1	11 12 13 13 14 14 15 15 16 16 16 16 16 16 16 16 16 16 16 16 16	SAND, fine grained, quartz, little s organics, 2.0" clay layer from12.9 0.5" clay burrow @ 11.9', gray (5 (SW-SM).	9'-13.1',		4	Sample #4 Depth = 14.0 Mean (mm): 0.17, Phi Sorting: 0.53 Silt: 2.44% (SP)	
-52.4	17	Fine grained, quartz, little silt, organics, gray (5Y-5/1), (SW-			5	Sample #5 Depth = 17.0 Mean (mm): 0.16, Phi Sorting: 0.49 Silt: 3.15% (SP)	
-53.7	18	No Recovery					
-	19	End of Boring					
	20=						
	21-	Note:				* Data Analyzed by UNO	
	▋	Soils are field visually classified in accordance with the				_ a.a	
	22	Unified Soil Classification System.					
	23-						
	24						
		1	PROJE	CT: BARA	TARIA	HOLE NUMBER: SPVC-03-10	

DRIL	LING LOG	DIVISION:	INSTALLA	TION:		SHEET 1 of 1	
1. PROJE	ECT BAR	ATARIA	10. SIZE AI				
2. LOCA	(Coordinates	•	11. DATUM		EVATIO	IN SHOWN(TBM or MSL)	
2 DBILLI	X= NG AGENCY: Ecl	3862781 Y=221972	12. MANUFACTURER'S DESIGNATION OF DRILL				
		n drawing title and file number)	Rossfelder P-3 Electric Vibracorer 13. TOT NO. OF OVERBURDEN SAMPLES TAKEN				
4. HOLE	SPVC-03-11					isturbed: 0	
5. NAME	5. NAME OF DRILLER Gregg Brooks, PhD			NO. OF			
6. DIREC	6. DIRECTION OF HOLE				Started	Completed	
		VERTICAL	17. ELEVA			3 1515 DLE -35.2 FT	
	NESS OF BURDE I DRILLED INTO					RY FOR BORING 92%	
	DEPTH OF HOL		.19. SIGNAT	URE OF	GEOLO	GIST ML and JB	
ELEV.	HT93D	CLASSIFICATION OF MATER (Description)	RIALS	CORE REC %	SAMPLE	REMARKS	
-35.2	0 =//						
-38.8	1 2 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	CLAY, some silt laminae, dark gra (CL).	y 5Y-4/1,		1	Sample #1 Depth = 1.5 *Mean (mm): 0.006, Phi Sorting: 1.83 *Sand: 0.01%, Silt: 62.32%, Clay: 37.73%	
-45.8	5 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	SAND, fine grained, quartz, little s clay burrows, trace organics, tra laminae, 2.0" sandy clay layer 3.8'-4.0', color darkens towards l gray (5Y-5/1) to dark gray (5Y-4/	ce silty from bottom,		2	Sample #2 Depth = 6.5 Mean (mm): 0.12, Phi Sorting: 0.56 Silt: 6.87% (SW-SM)	
-51.9	11 12 13 13 14 15 16 16 16 16 16 16 16 16 16 16 16 16 16	SAND, fine grained, quartz, silty 2.0" clay layer @ 14.3', 3.0" clay 15.5', gray (5Y-5/1), (SW-SM	layer @		3	Sample #3 Depth = 11.5 Mean (mm): 0.11, Phi Sorting: 0.60 Silt: 12.37% (SM)	
-52.6	17	SAND, fine grained, quartz, trace gray (5Y-5/2) (SP)	silt. olive		4	Mean (mm): 0.12, Phi Sorting: 0.53 Silt: 4.99% (SW-SM)	
	18	No Recovery				Ont. 4.3370 (OVV-OIVI)	
-54.2	19						
	20=	End of Boring					
		Note:				* Data Analysis d Socialis	
	21	Soils are field visually				* Data Analyzed by UNO	
	22	classified in accordance with the Unified Soil Classification System.					
	23						
	24						
-		•	PROJE	CT: BARA	ΤΔΡΙΔ	HOLE NUMBER: SPVC-03-11	

HOLL I					HOLE NO. SPVC-03-		
DRIL	LING LOG	DIVISION:	INSTALLA	TION:			SHEET 1 of 1
1. PROJE	BAF	RATARIA	10. SIZE AND TYPE OF BIT 3" 11. DATUM FOR ELEVATION SHOWN(TBM or MSL)				
2. LOCA	(Coordinates	s or Station) -3855695 Y=231398	11. DATUM		EVATIO IAVD 88		IBM or MSL)
3. DRILLI	NG AGENCY: Ec		12. MANUF				I OF DRILL
4. HOLE I	NO. (As shown o	on drawing title and file number)	Rossfelder P-3 Electric Vibracorer 13. TOT NO. OF OVERBURDEN SAMPLES TAKEN				
		SPVC-03-16	Dis			isturbed: 0	
5. NAME	OF DRILLER	Gregg Brooks, PhD	15. ELEVA				
6. DIREC	TION OF HOLE	VERTICAL	16. DATE H			3 0903	Completed
7. THICKI	NESS OF BURDE	EN 0.0 FT	17. ELEVA				T DRING 87%
	I DRILLED INTO		19. SIGNAT				
9. TOTAL	DEPTH OF HOL	-E 18.5 FT					
ELEV.	DEPTH CE	CLASSIFICATION OF MATER (Description)	RIALS	CORE REC %	SAMPLE		REMARKS
-36.3	0 =//						#1 Depth = 1.0
20	1 1 1	CLAY, trace silty pockets dark (5Y-4/1), (CL).	gray		1		nm): 0.004, Phi Sorting: 1.66 .02%, Silt: 51.60%, Clay:
-38	2	SAND, fine grained, quartz, some gray (5Y-4/1), (SM).	e silt, dark		2	*Mean (r	#2 Depth = 2.0 nm): 0.059, Phi Sorting: 1.48
-39.1	3 = 111	gray (51 -7/1), (5/1/).				7.68%	5.28%, Silt: 27.05%, Člay:
-41.9	4 1 5	SAND, fine grained, quartz, little laminae from 3.9' - 4.2' olive gray (SM).			3	Silt: 34.3 Sample: Mean (m	im): 0.09, Phi Sorting: 0.74 7% (SM) #3 Depth = 4.5 im): 0.13, Phi Sorting: 0.63 % (SW-SM)
-44.1	6	SAND, fine grained, quartz, some gray (5Y-5/2), (SM).	silt, olive		2		
-48.3	9 10 11	fine grained, quartz, little silt, tra laminae, olive gray (5Y-5/2),			4		#4 Depth = 10.0 nm): 0.10, Phi Sorting: 0.49 % (SM)
-51.7	13 H	SAND, fine grained, quartz, sor laminae, little clay laminae, trace olive gray (5Y-4/2), (SM-St	organics,		5	Mean (m Silt: 28.5	#5 Depth = 13.1 m): 0.09, Phi Sorting: 0.67 8% (SM) #6 Depth = 15.8
-52.5	16	SAND, fine grained, quartz, little gray (5Y-5/2), (SW-SM).			6	Mean (m	m): 0.11, Phi Sorting: 0.64 8% (SM)
F4.0	17	NO RECOVERY				Ont. 10.8	- 70 (ONI)
-54.8	10	End of Boring					
	19 =	End of Borning					
	20						
	21 22 23 23	Note: 1) Soils are field visually classified in accordance with the Unified Soil Classification System				* Data A	nalyzed by UNO
	24						
	1	I	PROJE	CT: BARA	TARIA		HOLE NUMBER: SPVC-03-16

						HOLE NO. SPVC-03-	
DRIL	LING LOG	DIVISION:	INSTALLA	TION:		SHEET 1 of 1	
1. PROJE	ECT BAR	ATARIA	10. SIZE AI				
2. LOCA	(Coordinates	•	11. DATUN		EVATIO	DN SHOWN ^{(TBM} or MSL)	
	X=	3855693 Y=231933	12. MANUFACTURER'S DESIGNATION OF DRILL				
	ING AGENCY: Ec		Rossfelder P-3 Electric Vibracorer				
4. HOLE	NO. (As shown o	on drawing title and file number)				DEN SAMPLES TAKEN disturbed: 0	
5 NAME	OF DRILLED	SPVC-03-17	14. TOTAL				
	OF DRILLER	Gregg Brooks, PhD	15. ELEVA				
6. DIREC	TION OF HOLE	VERTICAL	16. DATE H			Completed 03 0903 DLE -36,0 FT	
7. THICK	NESS OF BURDE	N 0.0 FT				RY FOR BORING 100%	
	H DRILLED INTO		19. SIGNAT	TURE OF	GEOLO	DGIST ML and JB	
9. IUTAI	L DEPTH OF HOL	.E 13.0 F1		I			
ELEV.	DEPTH CE	CLASSIFICATION OF MATER (Description)	RIALS	CORE REC %	SAMPLE	REMARKS	
-36	0 =//	SILTY CLAY, trace shell hash, ve	erv dark			Sample #1 Depth = 0.5 *Mean (mm): 0.007, Phi Sorting: 2.10	
-37.1	1 1 1//	gray (5Y-3/1), (CL).			1	*Sand: 1.83%, Silt: 60.08%, Clay: 38.18%	
-37.9	1//	CLAY, dark gray (5Y-4/1), (0			2	Sample #2 Depth = 1.5	
-38.6	2 7	CLAYEY SILT, very dark gray (5 (ML-CL).	5Y-3/1),		3	*Mean (mm): 0.005, Phi Sorting: 1.84 *Sand: 0.06%, Silt: 58.78%, Clay:	
-39.9	3 🗒 📗	SILT, some sand, dark gray (5Y-4	-/1), (ML).		4	41.09% Sample #3 Depth = 2.3	
	4	SILTY SAND, trace clay laminae,	dark grav			*Mean (mm): 0.016, Phi Sorting: 2.00 *Sand: 17.02%, Silt: 67.37%, Clay: 15.63%	
	5	(5Y-4/1), (SM).	aan gray		5	Sample #4 Depth = 3.0	
-42.4	6=111	1				*Mean (mm): 0.030, Phi Sorting: 1.67 *Sand: 38.29%, Silt: 52.02%, Clay:	
-43.4	7=///	CLAY, little silty sand layers/lamir dark gray (5Y-3/1), (CL).			1	9.67% Sample #5 Depth = 5.4	
-49.6	9	SAND, fine grained, some : layers/laminae, 0.5" organic layer gray (5Y-5/1), (SM).			6	*Mean (mm): 0.059, Phi Sorting: 1.17 *Sand: 61.58%, Silt: 33.65%, Clay: 4.69% Mean (mm): 0.09, Phi Sorting: 0.57 Silt: 28.85% (SM) Sample #6 Depth = 12.1 Mean (mm): 0.11, Phi Sorting: 0.57 Silt: 8.43% (SW-SM)	
	14=	End of Boring					
	15 16 17 17 18 18 19 19 12 12 1 12 12 12 12 12 12 12 12 12 12 1	Note: 1) Soils are field visually classified in accordance with the Unified Soil Classification System				* Data Analyzed by UNO	
	24—		BBO IE	CT: BARA	TADIA	HOLE NUMBER: SPVC-03-17	

			ı			HULE NO. SPVC-U3-		
DRIL	LING LOG	DIVISION:	INSTALLA	TION:		SHEET 1 of 1		
1. PROJE	ECT BAR	ATARIA		AND TYPE OF BIT 3"				
2. LOCA	(Coordinates	or Station) 3855717 Y=231941	11. DATUN		EVATIC AVD 88	N SHOWN (TBM or MSL) 3		
3. DRII I I	NG AGENCY: Eck		12. MANUFACTURER'S DESIGNATION OF DRILL Rossfelder P-3 Electric Vibracorer					
		n drawing title and file number)	Rossfelder P-3 Electric Vibracorer 13. TOT NO. OF OVERBURDEN SAMPLES TAKEN					
4. HOLE I	WU. (As shown 0	SPVC-03-17A	Disturbed: 0 Undisturbed: 0					
5. NAME	OF DRILLER		14. TOTAL					
	TION OF HOLE	Gregg Brooks, PhD	15. ELEVA		Started	Completed		
J. J.I.(E0		VERTICAL			06/09/0	3 0958 DLE -36.0 FT		
7. THICK	NESS OF BURDE	N 0.0 FT				RY FOR BORING 100%		
	H DRILLED INTO		19. SIGNAT	TURE OF	GEOLO	OGIST ML and JB		
ELEV.	DEPTH HT930	CLASSIFICATION OF MATER (Description)	IALS	CORE REC %	SAMPLE NUMBER	REMARKS		
-36	0 =							
-46.3	0 1 1 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Jetted to 10.3'						
-54.4	11-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1	SAND, fine grained, quartz, sor layers/laminae, 0.5" organic layer gray (5Y-5/1), (SM).	ne silt @ 16.0',		7	Sample #7 Depth = 17.1 Mean (mm): 0.10, Phi Sorting: 0.57 Silt: 11.88% (SM)		
51.7	20 21 22 23 24 24	End of Boring Expansion from 18.3 Note: 1) Soils are field visually classified in accordance with the Unified Soil Classification System.				*Data Analyzed by UNO		
			DDO IE	CT: BARA	TADIA	HOLE NUMBER: SPVC-03-17A		

			1			HOLE NO. SPVC-03-	
	LING LOG	DIVISION:	INSTALLA	TION:		SHEET 1 of 1	
1. PROJE	CT BARA	ATARIA	10. SIZE AND TYPE OF BIT 3"				
2. LOCAT	(Coordinates of	·	11. DATUN		EVATIO AVD 88	ON SHOWN(TBM or MSL)	
	X=3	855340 Y=232227	12. MANUFACTURER'S DESIGNATION OF DRILL				
3. DRILLII	NG AGENCY: Ecke		Rossfelder P-3 Electric Vibracorer 13. TOT NO. OF OVERBURDEN SAMPLES TAKEN				
4. HOLE N	NO. (As shown on	drawing title and file number)	13. TOT NO. OF OVERBURDEN SAMPLES TAKEN Disturbed: 0 Undisturbed: 0				
E NAME	OE DRILLED	SPVC-03-18	14. TOTAL NO. OF CORE BOXES 1				
		Gregg Brooks, PhD	15. ELEVA				
6. DIRECT	6. DIRECTION OF HOLE VERTICAL					Completed 03 1356 DLE -36.1 FT	
7. THICK	NESS OF BURDEN	1 0.0 FT				RY FOR BORING 100%	
	I DRILLED INTO R DEPTH OF HOLE		19. SIGNA	TURE OF	GEOLO	OGIST ML and JB	
9. TOTAL	DEFIN OF HOLE	14.9 F1					
ELEV.	LEGEND HT43D	CLASSIFICATION OF MATER (Description)	IALS	CORE REC %	SAMPLE NUMBER	REMARKS	
-36.1	0=///	OLAY ((01)			Sample #1 Depth = 0.5 *Mean (mm): 0.008, Phi Sorting: 2.05	
-37.2	1======================================	CLAY, soft, dark gray (5Y-4/1),			1	*Sand: 3.44%, Silt: 65.49%, Clay:	
-38		CLAYEY SAND, little clay, dark (5Y-4/1), (SC).	gray		2	31.09% Sample #2 Depth = 1.5	
	2	SAND, fine grained, quartz, little s	silt. trace			*Mean (mm): 0.032, Phi Sorting: 1.99 *Sand: 58.30%, Silt: 30.28%, Clay:	
-40	3 = 1 + 1 + 1	clay laminae, dark gray (5Y-4/1)			3	11.36% Mean (mm): 0.09, Phi Sorting: 0.62	
	4 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	SANDY SILT, trace organic lamin	ae dark			Silt: 33.7% (SM) Sample #4 Depth = 4.5	
	5 🗐 📗	gray (5Y-4/1), (ML).	ao, aark		4	*Mean (mm): 0.047, Phi Sorting: 1.32 *Sand: 54.03%, Silt: 38.90%, Clay:	
-41.8	⋰⋽┼┼┼					7.03% Mean (mm): 0.07, Phi Sorting: 0.46	
	6 7 7 8 8 1 9	SAND, fine grained, quartz, son laminae, trace organic laminae, ol (5Y-5/2), (SM).			3	Silt: 56.52% (ML) Sample #3 Depth = 7.5 Mean (mm): 0.08, Phi Sorting: 0.48 Silt: 33.69% (SM)	
-46.1	9	\					
-51.1	11 11 11 11 11 11 11 11 11 11 11 11 11	SAND, fine grained, quartz, son laminae, trace organic laminae, oi (5Y-5/2), (SW-SM).			5	Sample #5 Depth = 13.8 Mean (mm): 0.12, Phi Sorting: 0.47 Silt: 3.77% (SW-SM)	
	15	End of Boring					
	16	Expansion from 14.9'					
	17 H						
	19 11 20 11 21 11 22 11 22 11 23 11	Note: 1) Soils are field visually classified in accordance with the Unified Soil Classification System.				* Data Analyzed by UNO	
	24-		BBO IS	CT: BARA	TARIA	HOLE NUMBER: SPVC-03-18	

DRIL	LING LC	G	DIVISION:	INSTALLA	TION:		SHEET 1 of 1	
1. PROJE	СТ	BARA	TARIA	10. SIZE AND TYPE OF BIT 3"				
2. LOCA	TION (Coordi		or Station) 855339 Y=232228	11. DATUM		EVATIO	ON SHOWN(TBM or MSL)	
3. DRILLI	NG AGENCY			12. MANUFACTURER'S DESIGNATION OF DRILL				
4. HOLE			drawing title and file number)	Rossfelder P-3 Electric Vibracorer 13. TOT NO. OF OVERBURDEN SAMPLES TAKEN				
4. HOLE	NO. (15 5	SPVC-03-18A	Dis	sturbed:	0 Und	isturbed: 0		
5. NAME	OF DRILLER	Gregg Brooks, PhD	14. TOTAL 15. ELEVA					
6. DIREC	TION OF HO			16. DATE I		Started	Completed	
			VERTICAL	17. ELEVA			03 1437 DLE -36.1 FT	
	NESS OF BU						RY FOR BORING 91%	
	I DRILLED II DEPTH OF			.19. SIGNAT	URE OF	GEOLO	OGIST ML and JB	
ELEV.	DEPTH	LEGEND	CLASSIFICATION OF MATER (Description)	IALS	CORE REC %	SAMPLE NUMBER	REMARKS	
-36.1	0_							
-49.8		•••	Jetted to 13.7'					
-51.9	15		SAND, fine grained, quartz, trace (5Y-5/1), (SW-SM).	silt, gray		6	Sample #6 Depth=15.0 Mean (mm): 0.11, Phi Sorting: 0.50 Silt: 4.34% (SW-SM)	
-54.2 -84.8	16 17 17 18 18 18 18 18 18 18 18 18 18 18 18 18		fine grained, quartz, trace silty la trace organics, gray (5Y-5/1),			7	Sample #7 Depth=16.6 Mean (mm): 0.11, Phi Sorting: 0.50 Silt: 5.55% (SW-SM)	
-54.5			NO RECOVERY					
	19		End of Boring					
	20							
	21		Note:				*Data Analyzed by UNO	
	∄		Soils are field visually classified in accordance with the				Sala / mary 200 by Olivo	
	22		Unified Soil Classification System.					
	23							
	24							
	-			PRO IE	CT: BARA	TARIA	HOLE NUMBER: SPVC-03-18A	

				<u> </u>			HOLE NO. SPVC-03-2	
	LING LOC	3	DIVISION:	INSTALLA			SHEET 1 of 1	
1. PROJE	ECT B/	ARA	TARIA	10. SIZE A				
2. LOCAT	(Coordina		·	11. DATU		EVATIO IAVD 88	ON SHOWN (TBM or MSL) B	
3. DRILLII	NG AGENCY:		862698 Y=224860 erd College	12. MANUFACTURER'S DESIGNATION OF DRILL Rossfelder P-3 Electric Vibracorer				
4. HOLE N	NO. (As show	n on	drawing title and file number)	13. TOT NO. OF OVERBURDEN SAMPLES TAKEN				
			SPVC-03-21	Disturbed: 0 Undisturbed: 0				
5. NAME	OF DRILLER	(Gregg Brooks, PhD	15. ELEV				
6. DIRECT	TION OF HOLE	=	VERTICAL	16. DATE			Completed 03 0758	
7. THICK	NESS OF BUR	DEN	0.0 FT	-			DLE -35.0 FT RY FOR BORING 86%	
	DRILLED INT			19. SIGNA	TURE OF	GEOLO	OGIST ML and JB	
9. TOTAL	DEPTH OF H	OLE	18./ FT					
ELEV.	DEPTH (LEGEND	CLASSIFICATION OF MATER (Description)	IALS	CORE REC %	SAMPLE NUMBER	REMARKS	
-35	0-77	71						
-37.9	1 1 1 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		Alternating CLAY and SANDY SIL very dark gray (5Y-3/1), (ML-			1	Sample #1 Depth = 1.8 *Mean (mm): 0.013, Phi Sorting: 2.78 *Sand: 19.29%, Silt: 51.19%, Clay: 29.45%	
-40.7	3 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		CLAY, with some silty sand laye gray (5Y-4/1), (CL).	rs, dark		2	Sample #2 Depth = 5.3 *Mean (mm): 0.007, Phi Sorting: 2.00 *Sand: 2.83%, Silt: 66.66%, Clay: 30.55%	
	6 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		SAND, fine grained, quartz, little s organics. 2" organic layer @ 8.8' - (5Y-5/1), (SM).	ilt, trace 9.0', gray		3	Sample #3 Depth = 8.0 Mean (mm): 0.12, Phi Sorting: 0.52 Silt: 5.14% (SW-SM)	
-44.8	10-77	111	CLAY/SILT, little sand, dark gray (5Y-4/1),		1		
-45.6	11-		(ML-CL). SAND, fine grained, quartz, little s				Sample #4 Depth = 14.5	
-46.8	· · · · · · · · · · · · · · · · · · ·		(5Y-5/1), (SW-SM).	mi, yray		4	Mean (mm): 0.14, Phi Sorting: 0.43 Silt: 3.65% (SP)	
-48.2	12		SAND, fine grained, quartz, little organics, dark gray (5Y-4/1), (3		
-51	14 15		SAND, fine grained, quartz, little s clay burrows, gray (5Y-5/1), (SV			4		
-53.7	17-		NO RECOVERY					
	19		End of Boring					
	20 1 21 1 22 1 23 1 24 1 24 1		Note: 1) Soils are field visually classified in accordance with the Unified Soil Classification System.				* Data Analyzed by UNO	
=	· '			PROJI	ECT: BARA	TARIA	HOLE NUMBER: SPVC-03-21	

						HOLE NO. SPVC-03-	
DRIL	LING LOG	DIVISION:	INSTALLA	TION:		SHEET 1 of 1	
1. PROJE	ECT BAR	ATARIA	10. SIZE A				
2. LOCA	(Coordinates X=3	or Station) 3863027 Y=220636		N	AVD 88		
3. DRILLI	NG AGENCY: Eck	erd College	12. MANUFACTURER'S DESIGNATION OF DRILL Rossfelder P-3 Electric Vibracorer				
4. HOLE	NO. (As shown or	n drawing title and file number)	13. TOT NO. OF OVERBURDEN SAMPLES TAKEN				
		SPVC-03-23	Di:			isturbed: 0	
5. NAME	OF DRILLER	Gregg Brooks, PhD	15. ELEVA				
6. DIRECT	TION OF HOLE	VERTICAL	16. DATE I			Completed 3 0949	
7. THICK	NESS OF BURDE	N 0.0 FT	-			DLE -35.3 FT RY FOR BORING 96%	
8. DEPTH	I DRILLED INTO F	ROCK N/A				OGIST ML and JB	
9. TOTAL	DEPTH OF HOLE	E 18.9 FT					
ELEV.	DEPTH GEEND	CLASSIFICATION OF MATER (Description)	RIALS	CORE REC %	SAMPLE	REMARKS	
-35.3	0 -771	Alternating CLAV and SILT lover	o troop			Sample #1 Depth = 1.0	
-37	1	Alternating CLAY and SILT layer shell hash, very dark gray (5Y-3/1)			1	*Mean (mm): 0.013, Phi Sorting: 2.58 *Sand: 19.09%, Silt: 52.86%, Clay: 28.03%	
	2	SAND, some silt, trace shell hash,	very dark		2	Sample #2 Depth = 2.0 Mean (mm): 0.09, Phi Sorting: 0.61	
-38	3=1111	gray (5Y-3/1), (SM).				Silt: 29.42% (SM)	
	4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 8 1 8 1 8 1 8 1 8 1 8 1	SAND, little silt, 2" clay layers @ 3.3', 3" clay layer @ 7.6', 1" clay 8.5', very dark gray (5Y-3/1), (layer @		3	Sample #3 Depth = 5.0 Mean (mm): 0.11, Phi Sorting: 0.66 Silt: 15.18% (SM)	
-44 -44.8	9=1111	little silt, some organics, very da (5Y-3/1), (SM).	rk gray		4	Sample #4 Depth = 9.0 Mean (mm): 0.11, Phi Sorting: 0.58 Silt: 9.69% (SM)	
	10				5	Sample #5 Depth = 10.0 Mean (mm): 0.12, Phi Sorting: 0.49 Silt: 4.18% (SW-SM)	
-53.5	12 13 14 15 16 17 17 17 17 17 17 17	SAND, fine grained, quartz, som clay layer @ 12.2', 1/2" clay layer clay from 14.4'-14.7', 1.2" clay la 15.3', clay from 16.2'-16.5', 2" clay @ 16.7' and 17.9', dark gray (5Y-4	@ 13.4', ayer @ / pockets		6	Sample #6 Depth = 14.0 Mean (mm): 0.13, Phi Sorting: 0.53 Silt: 5.50% (SW-SM)	
-54.2	10 = 1-14	NO RECOVERY					
	20 21 22 23 23 23 23	End of Boring Note: 1) Soils are field visually classified in accordance with the Unified Soil Classification System.				* Data Analyzed by UNO	
	24						
			DPO IE	CT: BARA	TADIA	HOLE NUMBER: SPVC-03-23	

						HOLE NO. SPVC-03-2	
DRIL	LING LOG	DIVISION:	INSTALLA	TION:		SHEET 1 of 1	
1. PROJE	ECT BAR	ATARIA	10. SIZE A				
2. LOCA	TION (Coordinates	or Station) 3862629 Y=223158		N	IAVD 88		
3. DRILLII	NG AGENCY: Eck	kerd College	12. MANUFACTURER'S DESIGNATION OF DRILL Rossfelder P-3 Electric Vibracorer				
4. HOLE N	NO. (As shown or	n drawing title and file number)	13. TOT NO. OF OVERBURDEN SAMPLES TAKEN				
		SPVC-03-24	Di 14. TOTAL			isturbed: 0	
5. NAME	OF DRILLER	Gregg Brooks, PhD	15. ELEVA				
6. DIRECT	TION OF HOLE	VERTICAL	16. DATE I			Completed 13 1042	
7. THICK	NESS OF BURDE	N 0.0 FT	-			DLE -35.2 FT RY FOR BORING 95%	
	I DRILLED INTO I		19. SIGNA	TURE OF	GEOLO	OGIST ML and JB	
9. TOTAL	DEPTH OF HOL	E 18.8 FT					
ELEV.	DEPTH HT9	CLASSIFICATION OF MATER (Description)	RIALS	CORE REC %	SAMPLE NUMBER	REMARKS	
-35.2	0-//						
-38.1	1 1 2 2 1	CLAY, some silt laminae/layers, d (5Y-4/1), (CL).	lark gray		1	Sample #1 Depth = 1.0 *Mean (mm): 0.006, Phi Sorting: 1.97 *Sand: 0.04%, Silt: 65.50%, Clay: 34.50%	
-41.8	3 4 4 5 6	SILT, little sand, dark gray (5Y-4/	/1), (ML).		2	Sample #2 Depth = 4.0 Mean (mm): 0.10, Phi Sorting: 1.52 Silt: 79.19% (ML)	
-49.2	10 11 11 11 12 13 13 14 14 14 14 14 14 14 14 14 14 14 14 14	SAND, some silt, clay from 7.7' - 7 (5Y-5/1), (SM).	7.9', gray		3	Sample #3 Depth = 9.0 Mean (mm): 0.10, Phi Sorting: 0.58 Silt: 11.13% (SM)	
-53	15 16 1 17 17 17 17 17 17 17 17 17 17 17 17 1	little silty organic laminae, gray (t (SM).	5Y-5/1),		4	Sample #4 Depth = 15.5 *Mean (mm): 0.11, Phi Sorting: 0.63 Silt: 13.26% (SM)	
-54	18	NO RECOVERY					
31	19	End of Boring					
	21 22 23 23 23 23 23 23 23 23 23 23 23 23	Note: 1) Soils are field visually classified in accordance with the Unified Soil Classification System.				* Data Analyzed by UNO	
	24-						
			PROJE	CT: BARA	TARIA	HOLE NUMBER: SPVC-03-24	

	1					HOLE NO. SPVC-03-2	
	LING LOG	DIVISION:	INSTALLATION: SHEET 1 of 1				
1. PROJE	ECT BARA	TARIA	10. SIZE AND TYPE OF BIT 3"				
2. LOCA	TION (Coordinates of X=3)	or Station) 863432 Y=223257	11. DATUN		EVATIO IAVD 88	N SHOWN(TBM or MSL) 3	
3. DRILLI	NG AGENCY: Ecke		12. MANUFACTURER'S DESIGNATION OF DRILL Rossfelder P-3 Electric Vibracorer				
4. HOLE N	NO. (As shown on	drawing title and file number)	13. TOT NO. OF OVERBURDEN SAMPLES TAKEN				
		SPVC-03-25	Disturbed: 0 Undisturbed: 0 14. TOTAL NO. OF CORE BOXES 1				
5. NAME	OF DRILLER	Gregg Brooks, PhD	14. TOTAL 15. ELEVA				
6. DIRECT	TION OF HOLE	VERTICAL VERTICAL	16. DATE I	HOLE	Started	Completed	
7. THICK	NESS OF BURDEN	I 0.0 FT	-	TION TO	P OF HC	DLE -34.5 FT	
	I DRILLED INTO R					RY FOR BORING 95% DGIST ML and JB	
9. TOTAL	DEPTH OF HOLE	18.8 FT					
ELEV.	DEPTH DEPTH	CLASSIFICATION OF MATER (Description)	IALS	CORE REC %	SAMPLE	REMARKS	
-34.5	0						
	1 1 1 1 1 1	SAND, little silt, little clay, trace sh dark gray (5Y-4/1), (SM).			1		
-36.1	2					Sample #2 Depth = 3.0	
-38.1	3	trace silt, 4" clay layer from 2.1' - 2 (5Y-5/1), (SW-SM).	trace silt, 4" clay layer from 2.1' - 2.5', gray (5Y-5/1), (SW-SM).			*Mean (mm): 0.120, Phi Sorting: 0.52 *Sand: 91.08%, Silt: 7.19%, Clay: 1.65% Mean (mm): 0.10, Phi Sorting: 0.53	
-41	4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	CLAY, little silt and sand layers, d (5Y-4/1), (CL).				Mean (mm): 0.10, Phi Sorting: 0.53 Silt: 9.22%, (SM) Sample #3 Depth = 5.0 *Mean (mm): 0.011, Phi Sorting: 2.28 *Sand: 11.44%, Silt: 62.53%, Clay: 26.08%	
-43.5	7	SAND, trace silt, 4" clay layer 7.3 gray (5Y-5/1), (SM).	SAND, trace silt, 4" clay layer 7.3' - 7.7', gray (5Y-5/1), (SM).		4	Sample #4 Depth = 8.0 *Mean (mm): 0.128, Phi Sorting: 0.45 *Sand: 93.29%, Silt: 5.33%, Clay: 1.39% Mean (mm): 0.11, Phi Sorting: 0.56	
-44.5	9	CLAY, 2" silty sand layer 9.6' - yellowish brown (10YR-5/6), (M			3	Silt: 10.09. (SM)	
-46.5	11 - 11	SAND, little silt, gray (5Y-5/1),	(SM).		1		
-47.6	12	Alternating CLAY and SILTY SAN dark gray (5Y-4/1) and gray (5Y			5	Sample #5 Depth = 12.6 *Mean (mm): 0.118, Phi Sorting: 0.64 *Sand: 86.88%, Silt: 9.63%, Clay:	
	13 14 1	(SM-SC).				3.56% Mean (mm): 0.09, Phi Sorting: 0.71 Silt: 31.19%, (SM)	
-52.3	15 16 17 17 17 17 17 17 17 17 17 17 17 17 17	SAND, little silt, trace organics, 0.9 clay layer @ 15.3', gray (5Y-5/1)			1	Sample #1 Depth = 14.0 *Mean (mm): 0.130, Phi Sorting: 0.42 *Sand: 93.99%, Silt: 4.42%, Clay: 1.65% Mean (mm): 0.11, Phi Sorting: 0.51 Silt: 7.64% (SW-SM)	
-53.3	18	NO RECOVERY					
20.0	19	End of Boring					
	20 III	Note: 1) Soils are field visually classified in accordance with the Unified Soil Classification System.				* Data Analyzed by UNO	
	24						
		l .		CT: BARA		HOLE NUMBER: SPVC-03-25	

						HOLE NO. SPVC-03-	
DRIL	LING LOG	DIVISION:	INSTALLA	TION:		SHEET 1 of 1	
1. PROJE	ECT	TARIA	10. SIZE A				
2. LOCAT	(Coordinates of	·	11. DATUN		EVATIO	ON SHOWN(TBM or MSL)	
	X=3 NG AGENCY: Ecke	862579 Y=223816 erd College	12. MANUFACTURER'S DESIGNATION OF DRILL				
4. HOLE		drawing title and file number)	Rossfelder P-3 Electric Vibracorer 13. TOT NO. OF OVERBURDEN SAMPLES TAKEN				
- nole i	10. (SPVC-03-26	Disturbed: 0 Undisturbed: 0				
5. NAME	OF DRILLER	Gregg Brooks, PhD	14. TOTAL NO. OF CORE BOXES 1 15. ELEVATION GROUND WATER				
6. DIRECT	TION OF HOLE	VERTICAL	16. DATE I	HOLE	Started	Completed	
7 7111012	VICOS OF BURDEN		17. ELEVA			03 1225 DLE -35.0 FT	
	NESS OF BURDEN		18. TOTAL	CORE R	ECOVE	RY FOR BORING 96%	
	I DRILLED INTO R DEPTH OF HOLE		19. SIGNAT	TURE OF	GEOLO	OGIST ML and JB	
ELEV.	DEPTH DEPTH	CLASSIFICATION OF MATER (Description)	RIALS	CORE REC %	SAMPLE NUMBER	REMARKS	
-35	0-771	Alt. (1. OLA)				Sample #1 Depth = 0.8	
-36	1 1	Alternating CLAY and SILT layers/ dark gray (5Y-4/1) (ML-CL			1	*Mean (mm): 0.009, Phi Sorting: 2.20 *Sand: 2.50%, Silt: 66.93%, Clay: 30.64%	
-38.2	2 3	SILT, 1" clay layer @ 3.1', dark (5Y-4/1), (ML).	gray		2	Sample #2 Depth = 2.0 Mean (mm): 0.08, Phi Sorting: 0.52 Silt:42.94% (ML)	
-41.7	4 4 1 5 1 1 1 1 1 1 1 1 1 1	SAND, little silt, olive gray (5Y-5/2	2), (SM).		3	Sample #3 Depth = 5.0 Mean (mm): 0.13, Phi Sorting: 0.53 Silt: 5.53% (SM)	
-46.1	7 1 8 1 10 11 11	SAND, some silt, olive gray (5Y-5	/2), (SM).		4	Sample #4 Depth = 9.0 Mean (mm): 0.10, Phi Sorting: 0.71 Silt: 17.16% (SM)	
-50.8	12 13 14 14 15 15 15 15 15 15 15 15 15 15 15 15 15	SAND, little silty laminae, olive (5Y-5/2), (SM).	gray		5	Sample #5 Depth = 13.0 Mean (mm): 0.18, Phi Sorting: 0.81 Silt: 6.21% (SW-SM)	
-52.8	16	Alternating CLAY and SILT layers, dark gray (5Y-4/1), (ML-Cl			1		
-53.6	18	NO RECOVERY					
	19	End of Boring					
	20 21 21 22 23 23 24 24 24	Note: 1) Soils are field visually classified in accordance with the Unified Soil Classification System.				* Data Analyzed by UNO	
			DDO IE	CT: BARA	TARIA	HOLE NUMBER: SPVC-03-26	

							HOLE NO. SPVC-03-	
DRIL	LING LO	OG	DIVISION:	INSTALLATION: SHEET 1 of 1				
1. PROJE	СТ	BARA	TARIA	10. SIZE A				
2. LOCA	Coord		or Station)	11. DATU		EVATION AVD 88	ON SHOWN(TBM or MSL)	
			863028 Y=224053	12. MANUFACTURER'S DESIGNATION OF DRILL				
3. DRILLI			erd College				P-3 Electric Vibracorer	
4. HOLE	NO. (As sh	own on	drawing title and file number)	13. TOT NO. OF OVERBURDEN SAMPLES TAKEN Disturbed: 0 Undisturbed: 0				
	OF 55" : =	n	SPVC-03-27	Disturbed: 0 Undisturbed: 0 14. TOTAL NO. OF CORE BOXES 1				
	OF DRILLE	Gregg Brooks, PhD	15. ELEVA					
6. DIRECT	VERTICAL	16. DATE			Completed 93 1308 DLE -34.5 FT			
7. THICK	NESS OF BU	JRDEN	1 0.0 FT				RY FOR BORING 88%	
	I DRILLED I			19. SIGNA	TURE OF	GEOLO	OGIST ML and JB	
9. TOTAL	DEPTH OF	HOLE	17.8 FT					
ELEV.	DEPTH	LEGEND	CLASSIFICATION OF MATER (Description)	RIALS	CORE REC %	SAMPLE NUMBER	REMARKS	
-34.5	0-	///						
-36.5	1		CLAY, trace sandy laminae, 2" si layer @ 1.1' - 1.3', gray (5Y-4/1) a olive brown (10YR-5/6), (C	and light		1	Sample #1 Depth = 0.9 *Mean (mm): 0.008, Phi Sorting: 2.18 *Sand: 7.74%, Silt: 58.10%, Clay: 34.17%	
	3		SAND, fine grained, quartz, little gray (5Y-4/1), (SM).	silt, dark		2	Sample #2 Depth = 3.0 Mean (mm): 0.09, Phi Sorting: 0.56	
-39.3	4	Щļ					Silt: 21.91% (SM)	
-40.3	5		CLAY, trace silty sand, dark gray and light olive brown (10YR-5/6			1		
	SAND, fine grained, quartz, little organic layer @ 8.0', gray (5Y-8)				3	Sample #3 Depth = 7.7 Mean (mm): 0.12, Phi Sorting: 0.53 Silt: 4.93% (SW-SM)		
-43.6	9 1		Alternating CLAY and SILT layer			4	Sample #4 Depth = 9.4 *Mean (mm): 0.005, Phi Sorting: 1.72	
-44.6	10=	///	gray (5Y-4/1) and gray (5Y-5/1)	, (SC).		*	*Sand: 0.00%, Silt: 57.79%, Clay: 42.04%	
	11-		SAND, fine grained, quartz, little si layer from 11.4'-11.6', 4" clay lay	er from		5	Sample #5 Depth = 11.0 Mean (mm): 0.14, Phi Sorting: 0.63 Silt: 5.41% (SW-SM)	
-50.2	13 14 14 15 15 15 15 15 15 15 15 15 15 15 15 15		12.6'-13.0', 1" organic layer @ 10 organics, gray (5Y-5/1), (SW-9			6	Sample #6 Depth = 14.9 Mean (mm): 0.16, Phi Sorting: 0.59 Silt: 3.98% (SW-SM)	
-52.3	16		NO RECOVERY					
	18		End of Boring					
	19							
	20							
	▏ ∄		Note:					
	21=		Note: 1) Soils are field visually				* Data Analyzed by UNO	
	22		classified in accordance with the Unified Soil Classification System.					
	23		2, 2, 2, 2, 2, 2, 2, 3, 6, 7, 7, 7, 7, 7, 7, 7, 7, 7, 7, 7, 7, 7,					
	▏ ∄							
	24—							
				I DDO IF	CT: BARA	TADIA	HOLE NUMBER: SPVC-03-27	

						HOLE NO. SPVC-03-	
DRIL	LING LOG	DIVISION:	INSTALLA	TION:		SHEET 1 of 1	
1. PROJE	ECT BAR	ATARIA	10. SIZE AND TYPE OF BIT 3"				
2. LOCA	(Coordinates	· ·	11. DATUN			N SHOWN ^{(TBM} or MSL)	
	X=S	3862766 Y=222525	12. MANUF	NAVD 88 12. MANUFACTURER'S DESIGNATION OF DRILL			
3. DRILLI	NG AGENCY: Eck					P-3 Electric Vibracorer	
4. HOLE I	NO. (As shown or	n drawing title and file number)				DEN SAMPLES TAKEN isturbed: 0	
	05.000.150	SPVC-03-28	14. TOTAL				
	OF DRILLER	Gregg Brooks, PhD	15. ELEVA				
6. DIREC	TION OF HOLE	VERTICAL	16. DATE I		Started 06/10/0	Completed 3 1416	
7. THICK	NESS OF BURDE	N 0.0 FT				DLE -35.2 FT RY FOR BORING	
8. DEPTH	H DRILLED INTO F	ROCK N/A				OGIST ML and JB	
9. TOTAL	DEPTH OF HOLI	E 18.8 FT					
ELEV.	DEPTH CEGEND	CLASSIFICATION OF MATER (Description)	RIALS	CORE REC %	SAMPLE NUMBER	REMARKS	
-35.2	° = ///	(\ 41 -dd-			Sample #1 Depth = 0.5	
-36.2	1 1//	CLAY, soft, 1" sandy pocket @ 0 grayish brown (5Y-4/2), (C	.4 , dark L).		1	*Mean (mm): 0.008, Phi Sorting: 1.81 *Sand: 2.70%, Silt: 67.43%, Clay:	
	2 3 3 4 4 5 5				2	29.91% Sample #2 Depth = 4.0 Mean (mm): 0.11, Phi Sorting: 0.57 Silt: 11.98% (SM)	
-47.6	6 11 7 10 11 11 12	shell hash, clay laminae from 7. 8.7'-9.1' and 12.3'-12.4', trace of	D, some silt, fine grained, quartz, trace ell hash, clay laminae from 7.2'-7.3', '-9.1' and 12.3'-12.4', trace organics, very dark gray (5Y-3/1), (SM).		3	Sample #3 Depth = 8.0 Mean (mm): 0.12, Phi Sorting: 0.59 Silt: 11.44% (SM)	
-53.7	13 14 11 14	SAND, fine grained, quartz, trace organic layers, dark gray (5Y-4/			4	Sample #4 Depth = 15.0 Mean (mm): 0.14, Phi Sorting: 0.46 Silt: 3.94% (SP)	
-54	NO RECOVERY						
End of Boring							
20							
	21 22 23 23	Note: 1) Soils are field visually classified in accordance with the Unified Soil Classification System				* Data Analyzed by UNO	
	24						
<u>I</u>	27		PRO IF	CT: BARA	TARIA	HOLE NUMBER: SPVC-03-28	

			l				HOLE NO. SPVC-03-2
	LING LOG	DIVISION:	INSTALLA				SHEET 1 of 1
1. PROJE	ECT BAR	ATARIA	10. SIZE AND TYPE OF BIT 3" 11. DATUM FOR ELEVATION SHOWN(TBM or MSL)				
2. LOCA	TION (Coordinates	or Station) 3854692 Y=233110	11. DATUN		EVATIC IAVD 88		(TBM or MSL)
3. DRILLI	NG AGENCY: Ecl		12. MANUFACTURER'S DESIGNATION OF DRILL Rossfelder P-3 Electric Vibracorer				
4. HOLE	NO. (As shown o	n drawing title and file number)	13. TOT NO. OF OVERBURDEN SAMPLES TAKEN				
		SPVC-03-29	Di 14. TOTAL			isturbed: 0)
5. NAME	OF DRILLER	Gregg Brooks, PhD	15. ELEVA				
6. DIREC	TION OF HOLE	VERTICAL	16. DATE I			3 1517	Completed
7. THICK	NESS OF BURDE	N 0.0 FT	17. ELEVA 18. TOTAL				- I DRING 97%
	H DRILLED INTO		19. SIGNA	TURE OF	GEOLO	GIST ML a	and JB
9. TOTAI	L DEPTH OF HOL	E 15.6 FT			ı		
ELEV.	DEPTH GE	CLASSIFICATION OF MATER (Description)	IALS	CORE REC %	SAMPLE NUMBER		REMARKS
-35.8	0 -///	CLAY, soft, dark gray (5Y-4/1)	(CL)		1		#1 Depth = 0.4
-36.5	1 3//	Alternating SILT and CLAY layer	, ,	 			mm): 0.010, Phi Sorting: 2.03 5.59%, Silt: 68.46%, Clay:
-37.8	2	gray (5Y-4/1), (ML-CL).			2	Sample	#2 Depth = 1.2
-44	3 4 4 5 6 7	SAND, some silt, dark gray (5Y-4,	1), (SM).		3	*Sand: 5 32.30% Sample Mean (m	mm): 0.008, Phi Sorting: 2.25 .67%, Silt: 61.86%, Clay: #3 Depth = 5.0 m): 0.09, Phi Sorting: 0.62 9% (SM)
-47.8	9 = 10 = 11 = 11 = 11 = 11 = 11 = 11 = 1	SAND, little silt, 1" clay layer with o 10.8', dark gray (5Y-4/1), (S			4	Mean (m	#4 Depth = 10.0 m): 0.09, Phi Sorting: 0.51 i7% (SM)
	12 =//	CLAY, with trace organics, very d (5Y-3/1), (CL).	ark gray		1		
-50.9	13	SAND, fine grained, quartz, little organic layer @ 13.1', dark gray (5	Mean (m	#5 Depth = 14.0 nm): 0.12, Phi Sorting: 0.59 1% (SW-SM)
-51.4	15	NO RECOVERY					
	16=	End of Boring					
	17 18 19 19 19 19 19 19 19	Note: 1) Soils are field visually classified in accordance with the Unified Soil Classification System.				* Data A	nalyzed by UNO
	24						
			PROJE	CT: BARA	TARIA		HOLE NUMBER: SPVC-03-29

								HOLE NO. SPVC-03-
DRIL	LING LC	G	DIVISION:	INSTALLA	ATION:			SHEET 1 of 1
1. PROJE	СТ	BARA	ATARIA	10. SIZE AND TYPE OF BIT 3"				
2. LOCA	(Coordi		or Station)	11. DATU		EVATION NO SE		(TBM or MSL)
			3854691 Y=233114	12. MANU				N OF DRILL
3. DRILLI			erd College					ric Vibracorer
4. HOLE I	NO. (As sho	own or	drawing title and file number)	13. TOT NO. OF OVERBURDEN SAMPLES TAKEN Disturbed: 0 Undisturbed: 0				
5 NAME	OF DRILLE	SPVC-03-29A	14. TOTAL NO. OF CORE BOXES 1					
			Gregg Brooks, PhD	15. ELEVA				Completed
6. DIRECT	TION OF HO	LË	VERTICAL	16. DATE			3 1559	<u> </u>
7. THICK	NESS OF BU	JRDEI	N 0.0 FT				DLE -35.8 F RY FOR BO	-T Oring 95%
	DRILLED I			19. SIGNA	TURE OF	GEOLO	GIST ML a	and JB
9. TOTAL	DEPTH OF	HOLI	= 18.7 FT		1	ı		
ELEV.	DEPTH	LEGEND	CLASSIFICATION OF MATER (Description)	IALS	CORE REC %	SAMPLE NUMBER		REMARKS
-35.8	0				_			
-50.3			Jetted TO 14.5' SAND, some silt, 2" clayey layer	∂. 15 <i>I</i> /			Sample	#6 Depth = 15.0
-51.5	15		very dark gray (5Y-3/1), (SN	(1). (1).		6		nm): 0.13, Phi Sorting: 0.79
-54.3	16		SILTY SAND, dark gray (5Y-4/1)	, (SM).		29S#4		
3 110	19		NO RECOVERY				,	
	20 21 21 22 22 23		End of Boring Note: 1) Soils are field visually classified in accordance with the Unified Soil Classification System.				* Data A	nalyzed by UNO
	24							
				PROJI	ECT: BARA	TARIA		HOLE NUMBER: SPVC-03-29A

							HOLE NO. SPVC-03-	
DRILI	LING LC	G	DIVISION:	INSTALLA	TION:		SHEET 1 of 1	
1. PROJE	СТ	BARA	TARIA	10. SIZE AND TYPE OF BIT 3"				
2. LOCAT	(Coord		r Station)	11. DATUN		EVATIO AVD 88	N SHOWN(TBM or MSL)	
			855322 Y=233895	12. MANUF			SIGNATION OF DRILL	
	NG AGENCY			40. 75= :::			P-3 Electric Vibracorer	
4. HOLE N	IO. (As sho	own on	drawing title and file number)	13. TOT NO. OF OVERBURDEN SAMPLES TAKEN Disturbed: 0 Undisturbed: 0				
5 NAME	OF DRILLEI	P	SPVC-03-30	Disturbed: 0 Undisturbed: 0 14. TOTAL NO. OF CORE BOXES 1				
		(Gregg Brooks, PhD	15. ELEVA				
6. DIRECT	TION OF HO	LE	VERTICAL	16. DATE I			Completed 3 1057	
7. THICK	NESS OF BU	JRDEN	0.0 FT				RY FOR BORING 89%	
	I DRILLED II						OGIST ML and JB	
9. TOTAL	DEPTH OF	HOLE	18.8 FT					
ELEV.	DEPTH	LEGEND	CLASSIFICATION OF MATER (Description)	RIALS	CORE REC %	SAMPLE NUMBER	REMARKS	
-35.4	0	(1 2 2 2					Sample #1 Depth = 0.7	
-36.8	1=		SAND, little silt, little clay, 2" soft top, very dark gray (5Y-3/1), (SN			1	*Mean (mm): 0.038, Phi Sorting: 0.66 *Sand: 70.54%, Silt: 19.83%, Clay: 9.60%	
	2		SAND, little silt, 2" clay layer @ 2			2	Mean (mm): 0.10, Phi Sorting: 0.66 Silt: 21.34% (SM)	
-38.2	. ∄		dark gray (5Y-3/1), (SM).				Sample #2 Depth = 2.0	
	3 = 1		Some silt, dark gray (5Y-4/1),	(SM)		_	Mean (mm): 0.10, Phi Sorting: 0.61 Silt: 12.59% (SM)	
-40.1	4 🚽		Joine siit, dark gray (31-4/1),	(OIVI).		3	Sample #3 Depth = 4.0 Mean (mm): 0.11, Phi Sorting: 0.65	
- 4 0.1	5						Silt: 14.72% (SM)	
-43.8	6 7 7 8 8		SAND, fine grained, quartz, trace (5Y-5/1), (SW-SM).	silt, gray		4	Sample #4 Depth = 8.0 Mean (mm): 0.14, Phi Sorting: 0.40 Silt: 3.14% (SP)	
-47.6	91111111111111111111111111111111111111		SAND, fine grained, quartz, some laminae 8.8'- 9.2', clay laminae @ 10.5', gray (5Y-5/1), (SM)	10.4' and		5	Sample #5 Depth = 11.0 Mean (mm): 0.11, Phi Sorting: 0.76 Silt: 17.14% (SM)	
40.0	13		CLAY, dark gray (5Y-4/1), (C SAND, fine grained, quartz, little			7		
-48.9	· 3	///	(5Y-5/1), (SW-SM).			6	Sample #6 Depth = 14.0 *Mean (mm): 0.007, Phi Sorting: 2.17	
-49.7	14	///	CLAY, trace silty laminae, gray (s (CL).) 1-5/1),		3	*Sand: 2.97%, Silt: 62.39%, Clay: 34.66%	
-52.1	15 1 16 1		SAND, fine grained, quartz, little partially lithified clay nodule @ 16 (5Y-5/1), (SW-SM).			7	Sample #7 Depth = 15.5 Mean (mm): 0.17, Phi Sorting: 0.50 Silt: 1.75% (SP)	
-54.2	17		NO RECOVERY					
	19		End of Boring					
	20							
	<u>, </u>		Note:				* Data Analyzad by LINO	
	21		Soils are field visually				* Data Analyzed by UNO	
	22		classified in accordance with the Unified Soil Classification System.					
	23							
	24							
				PROJE	CT: BARA	TARIA	HOLE NUMBER: SPVC-03-30	

DRILL 1. PROJEC	ING LOG	DIVISION:	INSTALLA	TION:		SHEET 1 of 1		
1. PROJEC	r.T					J.ILLI 1 01 1		
	BAR	ATARIA	10. SIZE AND TYPE OF BIT 3"					
	(Coordinates		11. DATUN			N SHOWN(TBM or MSL)		
2. LOCATIO	ION X=	3855838 Y=234127	12. MANI IE		AVD 88			
3. DRILLING	G AGENCY: Ec		12. MANUFACTURER'S DESIGNATION OF DRILL Rossfelder P-3 Electric Vibracorer					
4. HOLE NO	O. (As shown o	n drawing title and file number)				DEN SAMPLES TAKEN		
		SPVC-03-31	Disturbed: 0 Undisturbed: 0 14. TOTAL NO. OF CORE BOXES 1					
5. NAME O	OF DRILLER	Gregg Brooks, PhD	15. ELEVA	TION GR	OUND V	VATER		
6. DIRECTION	ION OF HOLE	VERTICAL		16. DATE HOLE Started Completed 06/13/03 1155				
7. THICKNE	ESS OF BURDE	N 0.0 FT				DLE -35.0 FT RY FOR BORING 88%		
8. DEPTH	DRILLED INTO	ROCK N/A	19. SIGNAT	TURE OF	GEOLO	OGIST ML and JB		
9. TOTAL I	DEPTH OF HOL	E 19.0 FT						
ELEV.	LEGEND HT43D	CLASSIFICATION OF MATER (Description)	RIALS	CORE REC %	SAMPLE	REMARKS		
-35	0 =///					Sample #1 Depth = 1.0		
	1=	CLAY, little silt, dark gray (5Y-4/	1), (CL).		1	*Mean (mm): 0.008, Phi Sorting: 2.40 *Sand: 8.61%, Silt: 55.89%, Clay: 35.60%		
-36.7	2 ///	SAND, little silt, some clay, very d	ark grav			35.60% Sample #2 Depth = 2.0		
-37.4 -37.9	= 77	(5Y-3/1), (SC).			2 1	*Mean (mm): 0.081, Phi Sorting: 0.85 *Sand: 75.33%, Silt: 20.21%, Clay:		
	3 -	CLAY, trace shell hash, little silt, of (5Y-4/1), (CL).	lark gray			4.40%		
	4 5 6	SILTY SAND, trace organics, da (5Y-4/1), (SM).	rk gray		3	Mean (mm): 0.09, Phi Sorting: 0.61 Silt: 26.43% (SM) Sample #3 Depth = 5.5 *Mean (mm): 0.112, Phi Sorting: 0.57		
-41.6	6	<u> </u>				*Sand: 88.63%, Silt: 9.41%, Clay: 1.92% Mean (mm): 0.10, Phi Sorting: 0.57		
	7 1 1 1 1 1 1 1 1 1	SAND, fine grained, quartz, little sclay borrows, trace organics, gray (SW-SM)			4	Silt: 12.95% (SM) Sample #4 Depth = 9.0 Mean (mm): 0.17, Phi Sorting: 0.46 Silt: 2.59% (SP)		
-48	11 12 13 13 13 13 13 13 13 13 13 13 13 13 13				5	Sample #5 Depth = 11.0 Mean (mm): 0.14, Phi Sorting: 0.55 Silt: 2.64% (SP)		
-52.8	14	SAND, fine grained, quartz, little silt/clay layers, gray (5Y-5/1),			6	Sample #6 Depth = 14.0 Mean (mm): 0.11, Phi Sorting: 0.72 Silt: 14.64% (SM)		
-54	18	NO RECOVERY						
	20 21 22 22 23 23	End of Boring Note: 1) Soils are field visually classified in accordance with the Unified Soil Classification System.				* Data Analyzed by UNO		
	24		DDO IS	CT: BARA	TARIA	HOLE NUMBER: SPVC-03-31		

							HOLE NO. SPVC-03-3
DRIL	LING LOG	DIVISION:	INSTALLA	TION:			SHEET 1 of 1
1. PROJE	ECT BAI	RATARIA	10. SIZE A	ND TYPE	OF BIT	3"	
2. LOCA	(Coordinate	s or Station) =3855117 Y=233418	11. DATUN		EVATIC IAVD 88		(TBM or MSL)
3. DRILLII	NG AGENCY: Ed		12. MANUFACTURER'S DESIGNATION OF DRILL Rossfelder P-3 Electric Vibracorer				
4. HOLE		on drawing title and file number)	Rossfelder P-3 Electric Vibracorer 13. TOT NO. OF OVERBURDEN SAMPLES TAKEN				
SPVC-03-32						isturbed: 0	
5. NAME	OF DRILLER	Gregg Brooks, PhD	14. TOTAL 15. ELEVA				
6. DIRECT	TION OF HOLE		16. DATE I		Started		Completed
		VERTICAL	17. ELEVA			3 1312 DLE -35.6 F	T .
	NESS OF BURD						DRING 100%
-	I DRILLED INTO DEPTH OF HO		19. SIGNA	TURE OF	GEOLO	GIST ML a	and JB
ELEV.	HT43D	CLASSIFICATION OF MATER (Description)	RIALS	CORE REC %	SAMPLE NUMBER		REMARKS
-35.6 -36.1	0 -77	SILTY CLAY, very dark gray (5	V-3/1)		1		#1 Depth =0.3
50.1	<u>_</u>	SILTY CLAY, very dark gray (5 (ML-CL).	1-0/1),		'		nm): 0.011, Phi Sorting: 2.52 6.67%, Silt: 53.86%, Clay:
-42.4	2	SAND, some silt, trace shell hash gray (5Y-3/1), (SM).	, very dark		2	Sample :	#2 Depth = 3.0 m): 0.09, Phi Sorting: 0.59 6% (SM)
-45.8	7 8 9 10	SAND, little silt, very dark gray ((SM).	5Y-3/1),		3	Mean (m Silt: 3.94 Sample:	#3 Depth = 8.0 m): 0.12, Phi Sorting: 0.50 % (SW-SM) #4 Depth = 10.4
	= //	CLAY, some silty laminae, very (dark gray		4	*Sand: 0	nm): 0.005, Phi Sorting: 1.88 .25%, Silt: 54.78%, Clay:
-48.6	11 12 12 12 12 12 12 12 12 12 12 12 12 1	(5Y-3/1), (ML-CL). SAND, fine grained, quartz, little gray (5Y-4/1), (SW-SM)			5		#5 Depth = 11.5 m): 0.15, Phi Sorting: 0.53 % (SP)
-52	13 14 15 16	Fine grained, quartz, little silt, tra laminae, trace organics, dark gray (SW-SM).			6		#6 Depth = 15.0 m): 0.16, Phi Sorting: 0.53 % (SP)
-53.4	17	SAND, little clay, dark gray (5Y-4	l/1), (SC).		3		
-55.1	18 19	SAND, fine grained, quartz, little gray (5Y-4/1), (SW-SM)			5		
	21 22 23 23 24 24	End of Boring Expansion from 18.8' Note: 1) Soils are field visually classified in accordance with the Unified Soil Classification System				* Data A	nalyzed by UNO
			PROJE	CT: BARA	TARIA		HOLE NUMBER: SPVC-03-32

			1			HOLE NO. SPVC-03-	
DRIL	LING LOG	DIVISION:	INSTALLA	TION:		SHEET 1 of 1	
1. PROJE	ECT BA	RATARIA	10. SIZE A				
2. LOCAT	TION .	es or Station)	11. DATUM		EVATIC IAVD 88	ON SHOWN(TBM or MSL)	
	Х	=3855068 Y=232911	12. MANUI	12. MANUFACTURER'S DESIGNATION OF DRILL			
3. DRILLII	NG AGENCY: E	ckerd College		Rossfelder P-3 Electric Vibracorer			
4. HOLE NO. (As shown on drawing title and file number)						DEN SAMPLES TAKEN isturbed: 0	
		SPVC-03-34	14. TOTAL				
5. NAME	OF DRILLER	Gregg Brooks, PhD	15. ELEVA	TION GR	OUND V	VATER	
6. DIRECT	TION OF HOLE	VERTICAL	16. DATE			Completed 13 1551	
7. THICK	NESS OF BURD	EN 0.0 FT				DLE -35.9 FT RY FOR BORING 98%	
	I DRILLED INTO		19. SIGNA	TURE OF	GEOLO	OGIST ML and JB	
9. TOTAL	DEPTH OF HO	LE 18.0 FT					
ELEV.	DEPTH OU	CLASSIFICATION OF MA (Description)	ATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	
-35.9	0 =7.71					Sample #1 Depth = 1.0	
	1=/	Alternating SILT and CLAY I dark gray (5Y-3/1), (M			1	*Mean (mm): 0.019, Phi Sorting: 1.58 *Sand: 13.16%, Silt: 75.08%, Clay: 11.77%	
-38.1	2		- /-			Sample #2 Depth = 2.5	
	3	SILT, very dark gray (5Y-	3/1), (ML).		2	*Mean (mm): 0.037, Phi Sorting: 1.47 *Sand: 45.34%, Silt: 45.31%, Clay:	
-39.1	3 -]] -//	CLAY, gray (5Y-3/1),	. (CL).		3	9.35% Sample #3 Depth = 3.4	
	4	<u> </u>	, (OL).			*Mean (mm): 0.014, Phi Sorting: 2.15	
	<u>5</u>	SILTY SAND, little clay lamin			4	*Sand: 16.56%, Silt: 65.08%, Clay: 18.34%	
	4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	(5Y-4/1), (ML).				Sample #4 Depth = 5.0 *Mean (mm): 0.066, Phi Sorting: 0.97	
-42.3		• 1				*Sand: 59.48%, Silt: 36.74%, Clay: 3.77%	
	7 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -	‡ <u>1</u>				Mean (mm): 0.08, Phi Sorting: 0.56	
	8 <u>∃</u> }}	SAND, trace silt, trace clay la	aminae dark			Silt: 53.51% (ML) Sample #5 Depth = 8.0	
	<u>_</u>	gray (5Y-4/1), (SN			5	Mean (mm): 0.09, Phi Sorting: 0.53 Silt: 12.75% (SM)	
	- 1111	‡‡				J. 12.70 /0 (OW)	
-46.3	10-	‡‡					
	11	<u> </u>					
	. <u>. </u>	SILTY SAND, trace organics,	gray (5Y-5/1).			Sample #6 Depth = 12.5	
	12	(SM).	J , (O. 10/1),		6	Mean (mm): 0.10, Phi Sorting: 0.54 Silt: 9.93% (SM)	
	13	<u>‡</u>					
-49.7	14	<u> </u>					
	∃ ;;‡	<u> </u>					
	15	SAND, fine grained, quartz, lit laminae @ 17.2', gray (5Y			7	Sample #7 Depth = 16.0	
	16	ianiac © 17.2, gray (51	J, 17, (OIVI).		′	Mean (mm): 0.14, Phi Sorting: 0.63 Silt: 5.01% (SW-SM)	
	17-	<u>‡</u> ‡					
-53.5 -53.9	<u> </u>	NO RECOVER	Υ				
	18	End of Boring					
	19						
	20						
	∃	Note:					
	21	Soils are field visually				* Data Analyzed by UNO	
	22	classified in accordance with Unified Soil Classification Sys					
	23						
	∃						
	24—						
			I DDO ID	CT: BARA	TADIA	HOLE NUMBER: SPVC-03-34	

HOLE NO. SPVC-03-3								
DRIL	LING LOG	DIVISION:	INSTALLA	TION:		SHEET 1 of 1		
1. PROJE	ECT BAR	ATARIA	10. SIZE A					
2. LOCA	(Coordinates	•	11. DATUN			N SHOWN(TBM or MSL)		
	X=	3863189 Y=221706	NAVD 88 12. MANUFACTURER'S DESIGNATION OF DRILL					
3. DRILLI	NG AGENCY: Ec		Rossfelder P-3 Electric Vibracorer					
4. HOLE NO. (As shown on drawing title and file number)						DEN SAMPLES TAKEN isturbed: 0		
E NAME	OE DRILLER	SPVC-03-35	14. TOTAL					
	OF DRILLER	Gregg Brooks, PhD	15. ELEVA					
6. DIREC	TION OF HOLE	VERTICAL		16. DATE HOLE Started Completed 06/13/03 1703				
7. THICK	NESS OF BURDE	N 0.0 FT				DLE -35.1 FT RY FOR BORING 92%		
	I DRILLED INTO					OGIST ML and JB		
9. TOTAL	DEPTH OF HOL	E 18.8 FT						
ELEV.	DEPTH HT93D	CLASSIFICATION OF MATER (Description)	RIALS	CORE REC %	SAMPLE NUMBER	REMARKS		
-35.1	0 = 1 1 1					Sample #1 Depth = 1.0		
-36.8	0	SANDY SILT, little clay, trace she dark gray (5Y-4/1), (ML).			1	*Mean (mm): 0.007, Phi Sorting: 2.10 *Sand: 6.31%, Silt: 53.81%, Clay: 39.76%		
-40.9	3100	SAND, trace silt, trace organics, tr dark gray (5Y-4/1), (SM).			2	Sample #2 Depth = 3.0 Mean (mm): 0.12, Phi Sorting: 0.57 Silt: 8.2% (SW-SM)		
-42.9	7	SAND, fine grained, quartz, 1" org @ 7.3', little clay laminae @ 7.8 (5Y-5/1), (SW-SM).			3	Sample #3 Depth = 6.8 Mean (mm): 0.12, Phi Sorting: 0.45 Silt: 2.51% (SP)		
-46.1	9 11 10 11 11 11 11 11 11 11 11 11 11 11	SAND, fine grained, quartz, little clay layer @ 9.0', 1" clay layer @ clayey silt layer @ 11.0', gray (5 (SM).	9.8', 3"		4	Sample #4 Depth = 8.2 Mean (mm): 0.12, Phi Sorting: 0.55 Silt: 6.45% (SW-SM)		
-49.3	11 12 13 13	Trace silt, trace organics, gray (5 (SM).	5Y-5/1),		2			
-52.4	15— 16— 17—	SAND, fine grained, quartz, little organics, 1" clay layer at 15.5' and gray (5Y-5/1), (SW-SM).	d at base,		5	Sample #5 Depth = 16.0 Mean (mm): 0.16, Phi Sorting: 0.47 Silt: 3.51% (SP)		
-53.9	18	NO RECOVERY						
	19 20 21 22 22 23 23 23 23 25 25 25 25 25 25 25 25 25 25 25 25 25	Note: 1) Soils are field visually classified in accordance with the Unified Soil Classification System.				* Data Analyzed by UNO		
	24		BB0 /=	CT: BARA	TARIA	HOLE NUMBER: SPVC-03-35		
					. MKIA			

EMPIRE 2002 VIBRACORE LOGS

						HOLE NO. EMVC-02
DRILLII	NG LOG	DIVISION:	INSTALLA	TION:		SHEET 1 of 1
1. PROJECT	r BAF	RATARIA	10. SIZE A			
2. LOCATIO	(Coordinate	s or Station) :3837493 Y=270868	11. DATUM FOR ELEVATION SHOWN (TBM or MSL) NAVD 88			
3. DRILLING AGENCY: Eckerd College		12. MANUI	12. MANUFACTURER'S DESIGNATION OF DRILL Rossfelder P-3 Electric Vibracorer			
4. HOLE NO.	(As shown o	on drawing title and file number)	i			DEN SAMPLES TAKEN isturbed: 0
		EMVC-02-05	14. TOTAL			
5. NAME OF	F DRILLER	Gregg Brooks, PhD	15. ELEVA			VATER Completed
6. DIRECTIO	ON OF HOLE	VERTICAL	16. DATE			2 12:26 DLE -14.9 FT
7. THICKNES	SS OF BURD	EN 0.0 FT				RY FOR BORING 77%
	RILLED INTO		19. SIGNA	TURE OF	GEOLG	OGIST ML and JB
	DEPTH HT930	CLASSIFICATION OF MATER (Description)	RIALS	CORE REC %	SAMPLE	REMARKS
-14.9 -16	°=///	CLAY, soft, trace shell hash, 1" fin sand layer at 0.3' and 1.0' olive (5Y-4/2), (CL).			1	Sample #1 Depth = 0.5 *Mean (mm): 0.012, Phi Sorting: 2.2 *Sand 13.5%, Silt 62.3%, Clay 24.2%
-21		1" layer of very fine grained sand (layer of fine grained sand @ 3.4' ax 1/4" long sand filled burrow @ 3 gray (5Y-4/2), (CL).	nd 4.3', 4"		2	Sample #2 Depth = 3.1 *Mean (mm): 0.006, Phi Sorting: 2.1 *Sand 9.7%, Silt 47.6%, Clay 42.7%
-25	7 mm m m m m m m m m m m m m m m m m m	Alternating CLAY and very fine grai laminae, 1/2" layer of leafy organi and 8.6", dark gray (5Y-4/1), (cs @ 6.9'		3	Sample #3 Depth = 7.4 *Mean (mm): 0.02, Phi Sorting: 2.3 *Sand 26.1%, Silt 58.0%, Clay 15.9%
-29.4	11 11 12 12 13 13 14 14 14 14 14 14 14 14 14 14 14 14 14	CLAY, trace sandy laminae, trace dark gray (5Y-4/1), (CL).			4	Sample #4 Depth = 12.6 *Mean (mm): 0.012, Phi Sorting: 2.2 *Sand 13.6%, Silt 63.6%, Clay 22.9%
-33.7	15.11 16.11 17.11 18.11	No Recovery				
50.1	20	End of Boring Note: 1) Soils are field visually classified in accordance with the Unified Soil Classification System.				* Data Analyzed by UNO
	4+		PROJE	CT: BARA	TARIA	HOLE NUMBER: EMVC-02-05

	INC LCC L		I			HOLE NO. EMVC-02-
	LING LOG	DIVISION:	INSTALL			SHEET 1 of 1
1. PROJE	ECT BARA	TARIA)	AND TYPE		
2. LOCAT	(Coordinates of	or Station) 831941 Y=270239	11. DATU		EVATION 88	ON SHOWN ^{(TBM} or MSL) 3
	Λ=3		12. MANUFACTURER'S DESIGNATION OF DRILL			
	NG AGENCY: Eck	erd College drawing title and file number)	13 TOT N			P-3 Electric Vibracorer DEN SAMPLES TAKEN
4. HOLE N	.OV	EMVC-02-17	ì			isturbed: 0
5 NAME	OF DRILLER ,			L NO. OF		
		Gregg Brooks, PhD	15. ELEVA		OUND \ Started	VATER Completed
6. DIRECT	TION OF HOLE	VERTICAL				2 08:59 DLE -20.1 FT
7. THICK	NESS OF BURDEN	1 0.0 FT				RY FOR BORING 44 %
	I DRILLED INTO R		19. SIGNA	TURE OF	GEOL	OGIST ML and JB
9. TOTAL	DEPTH OF HOLE	19.0 F I	-			
ELEV.	HT43D	CLASSIFICATION OF MATER (Description)	RIALS	CORE REC %	SAMPLE	REMARKS
-20.1	°=///	CLAY, soft, some very fine grain	ed sand		4	Sample #1 Depth = 0.8
-21.3	1=///	laminae, trace shell hash, olive (5Y-4/2), (CL).	gray		1	*Mean (mm): 0.016, Phi Sorting: 2.4 *Sand 20.9%, Silt 58.5%, Clay 20.6
	2 📑 🔠	SAND, fine to very fine grained, qu	artz, trace	ı		Sample #2 Depth = 3.0
	<u>,</u> ⊒∷	silt, trace shell hash, 1" shelly sand 4.0', olive gray (5Y-4/2), (S	l layer @		2	Mean (mm): 0.13, Phi Sorting: 0.64 Silt: 5.8% (SW-SM)
-24	Ĭ ~ <u>`</u> ∃∷∐					
	4 = 7///					
	5-₹///					
	6 1//	SANDY SILT, some silty clay laye			3	Sample #3 Depth = 6.0 *Mean (mm): 0.024, Phi Sorting: 3.0
	■	organic laminae, olive gray (5Y-4/	z), (3U).		-	*Sand 35.9%, Silt 43.7%, Clay 20.3%
	7 1///					
-28.4	8 -2 ///					
	9.					
	10.					
	11=					
	12=					
	13.					
		No Recovery				
	14-					
	15 =					
	16.					
	47					
	17=					
	18 🚆					
-39,1	19	End of Boring		4		
	20=	End of Boring				
	∃	Note:				* Data Anglured builting
	21	Soils are field visually		}		* Data Analyzed by UNO
	classified in accordance with the Unified Soil Classification System.					
	23.=					
	∄					
	24		BBC :	ECT: BABA	TARIA	HOLE NUMBER: EMVC-02-17
			PROJ	ECT: BARA	IARIA	HOLE NUMBER: EMVC-02-17

						HOLE NO. EMVC-02-
DRIL	LING LOG	DIVISION:	INSTALLA	ATION:		SHEET 1 of 1
1. PROJE	CT BARA	TARIA	10. SIZE AND TYPE OF BIT 3"			
	(Coordinates o		11. DATUI			ON SHOWN (TBM or MSL)
2. LOCA	IION X=3	831927 Y=270212	NAVD 88 12. MANUFACTURER'S DESIGNATION OF DRILL			
3. DRILLII	3. DRILLING AGENCY: Eckerd College		Rossfelder P-3 Electric Vibracorer			
4. HOLE NO. (As shown on drawing title and file number)			1			DEN SAMPLES TAKEN sturbed: 0
		EMVC-02-17A	14. TOTAL			
5. NAME	OF DRILLER	Gregg Brooks, PhD	15. ELEVA			
6. DIRECT	TION OF HOLE	VERTICAL	16. DATE			Completed 2 10:15
7. THICK	NESS OF BURDEN	≀ 0.0 FT				DLE -20.1 FT RY FOR BORING 100 %
	I DRILLED INTO R					OGIST ML and JB
9. TOTAL	DEPTH OF HOLE	18.4 FT				
ELEV.	HT990	CLASSIFICATION OF MATER (Description)	IALS	CORE REC %	SAMPLE NUMBER	REMARKS
-20.1	0					
	11111111111111111111111111111111111111	Jet				
-27.1	6. 7					
-32.3		SAND, very fine grained, quartz, some clay, dark gray (5Y-4/1), (S			1	Sample #1 Depth = 9.5 *Mean (mm): 0.026, Phi Sorting: 2.9 *Sand 32.6% Silt 49.3% Clay 18.2%
		CLAY, trace very fine grained sand olive gray (5Y-4/2), (CL).			2	Sample #2 Depth = 12.5 *Mean (mm): 0.009, Phi Sorting: 2.2
-33.4	13.7//					*Sand 9.1% Silt 62.8% Clay 28.2%
-37.3	14 15 16 17 17 17 17 17 17 17	SILTY CLAY, some very fine grain sand, dark gray (5Y-4/1), (SM			1	
-39	18.	CLAY, trace very fine grained sand olive gray (5Y-4/2), (CL).			2	
- "	19 = 7 / 7	End of Boring				
	20-	Expansion from 18.4'.				
	21.	Note:				* Data Analyzed by UNO
	22.	Soils are field visually classified in accordance with the Unified Soil Classification System.				7 7 7
	, I					
	24—		DPO I	CT: BARA	TARIA	HOLE NUMBER: EMVC-02-17A
			PROJE	UI. BARA	IARIA	HOLE NOWIDER, ENVIOLUZ-17A

						HOLE NO. EMVC-02-
DRIL	LING LOG	DIVISION:	INSTALLA	TION:		SHEET 1 of 1
1. PROJE	ECT BARA	ATARIA	10. SIZE A			
2. LOCA	(Coordinates	or Station) 3832701 Y=271426	11. DATUM FOR ELEVATION SHOWN ^(TBM or MSL) NAVD 88			3
3. DRILLI	NG AGENCY: Eck	kerd College	12. MANUF			SIGNATION OF DRILL P-3 Electric Vibracorer
4. HOLE	NO. (As shown or	n drawing title and file number)	13. TOT NO. OF OVERBURDEN SAMPLES TAKEN			
		EMVC-02-18	Disturbed: 0 Undisturbed: 0			
5. NAME	OF DRILLER	Gregg Brooks, PhD	14. TOTAL 15. ELEVA			
6. DIREC	TION OF HOLE	VERTICAL	16, DATE I			Completed 2 10:49
7. THICK	NESS OF BURDE	N 0.0 FT				DLE -18.2 FT RY FOR BORING 94 %
	H DRILLED INTO I					DGIST ML and JB
9. TOTAL	L DEPTH OF HOLI	E 19.0 FT				
ELEV.	DEPTH QUENT	CLASSIFICATION OF MATER (Description)	RIALS	CORE REC %	SAMPLE NUMBER	REMARKS
-18.2	0=///	CLAY, soft, trace organics, oliv	e gray			Sample #1 Depth = 0.5 *Mean (mm): 0.007, Phi Sorting: 1.5
-19.2	1 <u>=///</u>	(5Y-4/2), (CL).			1	*Sand 0.0% Silt 73.0% Clay 26.9%
-19.8	2	SILTY SAND, very fine grained, qu shell hash, dark gray (5Y-4/1),	(SM).		1	Sample #2 Depth = 1.3 *Mean (mm): 0.072, Phi Sorting: 0.8
-20.5 -21.1	<u>~</u>	CLAY, trace very fine grained sand olive gray (5Y-4/2), (CL).	/		2	*Sand 66.6% Silt 29.5% Clay 3.9% Mean (mm): 0.07, Phi Sorting: 0.52
	3 = 1	SILTY SAND, very fine grained, q organic layer @ 2.2', 1" clay layer	r @ 2.8', 🖊			Silt: 54.0% (ML)
	11111111111111111111111111111111111111	SAND, fine to very fine grained, qui	dark gray (5Y-4/1), (SM). SAND, fine to very fine grained, quartz, some silt laminae, trace clay laminae, gray		3	Sample #3 Depth = 4.0 Mean (mm): 0.12, Phi Sorting: 0.70 Silt: 8.45% (SW-SM)
-24.4	6 3 11	((((((((((((((((((((La ala ana			
-25.2	7 = 7//	CLAY, some silt, trace organics, o (5Y-4/1), (CL).	iark gray		4	
-28.6	8 9 10	SAND, very fine grained, quartz, s trace organics, gray (5Y-5/1),			5	Sample #5 Depth = 8.5 Mean (mm): 0.08, Phi Sorting: 0.57 Silt: 38.46% (SM)
-32.8	11 11 12 13 13 14 14 14 14 14 14 14 14 14 14 14 14 14	SILTY CLAY, trace very fine grain laminae, dark gray (5Y-4/1), (4	Sample #4 Depth = 11.0 *Mean (mm): 0.013, Phi Sorting: 2.3 *Sand 17.4% Silt 61.4% Clay 21.3%
-36	15 H 16 H 17 H 17 H	CLAY, trace silty sand laminae, d (5Y-4/1), (CL).	CLAY, trace silty sand laminae, dark gray (5Y-4/1), (CL).		1	
	18	No Recovery				
-37.2	19	End of Boring				
	20.	End of Bound				
		Note:				* Data Applyzed by UNIO
	1) Soils are field visually					* Data Analyzed by UNO
	22	classified in accordance with the Unified Soil Classification System.				
	23					
	24				i	
	24			CT: BARA		HOLE NUMBER: EMVC-02-18

						HOLE NO. EMVC-02-
DRILI	LING LOG	DIVISION:	INSTALLA	TION:		SHEET 1 of 1
1. PROJE	CT BARA	ATARIA	10. SIZE A			
2. LOCA	(Coordinates		11. DATUM FOR ELEVATION SHOWN ^(TBM or MSL) NAVD 88			
3. DRILLII	NG AGENCY: Eck	erd College	12. MANUFACTURER'S DESIGNATION OF DRILL Rossfelder P-3 Electric Vibracorer			
4. HOLE N	4. HOLE NO. (As shown on drawing title and file number) EMVC-02-20					DEN SAMPLES TAKEN sturbed: 0
5. NAME	OF DRILLER	Gregg Brooks, PhD	14. TOTAL			
	TION OF HOLE	VERTICAL	15. ELEVA 16. DATE I	HOLE	Started	Completed 2 13:54
7. THICK	NESS OF BURDE	N 0.0 FT				DLE -16.1 FT
	DRILLED INTO F					RY FOR BORING 83 % DGIST ML and JB
	DEPTH OF HOLE		10.0.0.0.0			
ELEV.	HTGEND	CLASSIFICATION OF MATER (Description)	RIALS	CORE REC %	SAMPLE	REMARKS
-16.1	0 = ///	CLAY, soft from 0.0' to 0.7', oliv (5Y-4/2), (CL).	e gray	 	1	Sample #1 Depth = 1.0 *Mean (mm): 0.011, Phi Sorting: 2.3
-17.7	`∃ <i>///</i>	(3. 112), (32).				*Sand 13.5% Silt 60.8% Clay 25.7%
-20.1	3 - 1	SILTY CLAY, some very fine grain dark gray (5Y-4/1), (SM-S			2	Sample #2 Depth = 2.5 *Mean (mm): 0.016, Phi Sorting: 2.4 *Sand 20.6% Silt 59.8% Clay 19.7%
-22.4	5 H	SAND, fine to very fine grained, quartz, trace silt, olive gray (5Y-4/2), (SP).			3	Sample #3 Depth = 5.0 Mean (mm): 0.16, Phi Sorting: 0.51 Silt: 2.89% (SP)
-23.9	7=	SAND, fine grained, quartz, trace (5Y-5/1), (SP).	silt, gray		4	Sample #4 Depth ≠ 6.8 Mean (mm): 0.15, Phi Sorting: 0.69 Silt: 5.02% (SW-SM)
-31.8	8 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	SILTY CLAY, some very fine grain dark gray (5Y-4/1), (SM-S0			5	Sample #5 Depth = 13.0 *Mean (mm): 0.022, Phi Sorting: 2.5 *Sand 30.0% Silt 53.5% Clay 16.5%
-35.1	17-11 18-11 18-11	No Recovery				
	19	End of Boring		1		
	20 H 20 H 21 H 22 H 23 H 23 H 24 H 24 H 24 H 24 H 24	Note: 1) Soils are field visually classified in accordance with the Unified Soil Classification System.				* Data Analyzed by UNO
	24		550 15	OT, BADA	TABIA	HOLE MUMPER, EMVO 00 00
			PROJE	CT: BARA	IAKIA	HOLE NUMBER: EMVC-02-20

						HOLE NO. EMVC-02	
DRILI	ING LOG	DIVISION:	INSTALI	ATION:		SHEET 1 of 1	
1. PROJE	CT BAF	RATARIA		AND TYPE			
2. LOCAT	FION	s or Station) =3835948 Y=270980			1AVD 88		
3. DRILLI	NG AGENCY: Ed		12. MAN	12. MANUFACTURER'S DESIGNATION OF DRILL Rossfelder P-3 Electric Vibracorer			
4. HOLE NO. (As shown on drawing title and file number)			1			DEN SAMPLES TAKEN	
		EMVC-02-20A		Disturbed:		listurbed: 0	
5. NAME	OF DRILLER	Gregg Brooks, PhD		ATION GR			
6. DIRECT	TION OF HOLE	VERTICAL	16. DAT			Completed 02 09:47	
7. THICKN	NESS OF BURD	EN 0.0 FT				OLE -16.1 FT ERY FOR BORING 93 %	
	DRILLED INTO					OGIST ML and JB	
9. TOTAL	DEPTH OF HO	LE 18.4 FT					
ELEV.	HT43D	CLASSIFICATION OF MAT (Description)	TERIALS	CORE REC %	SAMPLE	REMARKS	
-16.1	· •	 		-			
-30.1	0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	JET					
-33.1	15— 16— 17—	Alternating SILT and CLAY laye (5Y-4/2), (ML).	ers, olive gray		1	Sample #1 Depth = 15.5 *Mean (mm): 0.017 , Phi Sorting: 2.6 *Sand 26.5%, Silt 53.4%, Clay 20.1%	
	""計前	SAND, very fine grained, quar olive gray (5Y-4/2), (S			2	Sample #2 Depth = 17.5 Mean (mm): 0.09 , Phi Sorting: 0.66	
-34.2 -34.5	18 = 1111	No Recovery				Silt: 20.94% (SM)	
	19	End of Boring Note: 1) Soils are field visually classified in accordance with the Unified Soil Classification Systems.				* Data Analyzed by UNO	
			PRO	JECT: BARA	TARIA	HOLE NUMBER: EMVC-02-20A	

_						HOLE NO. EMVC-02-
DRILL	ING LOG	DIVISION:	INSTALLA	ATION:		SHEET 1 of 1
1. PROJE	CT BARA	TARIA	10. SIZE A			
	(Coordinates o		11. DATUM FOR ELEVATION SHOWN (TBM or MSL)			
2. LOCAT	X=3	834858 Y=270176	NAVD 88 12. MANUFACTURER'S DESIGNATION OF DRILL			
3. DRILLIN	NG AGENCY: Ecke	erd College				P-3 Electric Vibracorer
4. HOLE N	O. (As shown on	drawing title and file number)	1			DEN SAMPLES TAKEN sturbed: 0
		EMVC-02-23	14. TOTAL			
5. NAME	OF DRILLER	Gregg Brooks, PhD	15. ELEVA			
6. DIRECT	TION OF HOLE	VERTICAL	16. DATE	IIOLL	Started	Completed 2 15:52
7 THOUA	NESS OF BURDEN			TION TO	P OF HO	DLE -17.9 FT
	DRILLED INTO R					RY FOR BORING 95 %
	DEPTH OF HOLE		19. SIGNA	TURE OF	GEOLU	OGIST ML and JB
ELEV.	LEGEND	CLASSIFICATION OF MATER (Description)	RIALS	CORE REC %	SAMPLE	REMARKS
-17.9	0-777	CLAY, soft, very dark gray (5Y-3)	(1), (CL)			Cample #0 Donth = 1.0
	1 1 1 1 1	SAND, very fine grained, quartz,	little silt,		2	Sample #2 Depth = 1.0 Mean (mm): 0.10, Phi Sorting: 0.62
-19.3	<u> </u>	trace shell hash, dark gray (5Y-4/	i), (SM).			Silt: 14.29% (SM)
	2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1					
	3 🗐 📗	Alternating CLAY, SILT, and ve	rv fine			Sample #3 Depth = 4.5
	₄∄Ⅱ	grained SAND laminae, dark gray (SM-SC).	(5Y-4/1),		3	*Mean (mm): 0.024, Phi Sorting: 2.1 *Sand 36.9% Silt 50.4% Clay 12.7%
	31/2	,				Garia 50.576 Oil: 50.476 Oilay 12.1776
	5 📆 📗					
-23.9	6 = 1			+	-	Samula #4 Danth = 7.0
	, <u>≝</u> ///	CLAY, little sandy silt laminae, da (5Y-4/1), (CL).	ark gray		1	Sample #1 Depth = 7.0 *Mean (mm): 0.018, Phi Sorting: 2.3
-25.6		, , , ,				*Sand 26.8% Silt 56.4% Clay 16.8%
	8 ∃					
	۶ ⊒ ∏	Alternating CLAY, SILT, and ve grained SAND laminae, dark gray	ry fine		3	
!	10 🗐	(SM-SC).	(01-4/1),		3	
	∃ ⊘					
-29.2	11			+	<u> </u>	
	12	CLAY, little sandy silt laminae, da	ark gray			
	13=///	(5Y-4/1), (CL).	•		1	
-31.7						
	14	Alternating CLAY, SILT, and ve				
	15	grained SAND laminae, dark gray (SM-SC).	(5Y-4/1),		3	
-33.9	16					
	<u></u> <u>∃</u> ///	CLAY, little sandy silt laminae, da	ark gray			
	17 📆	(5Y-4/1), (CL).			1	
-36	18 = 7//	No Recovery				
-36.9	19.			-		
	20-	End of Boring				
		Note:				
	21=	Note: 1) Soils are field visually				* Data Analyzed by UNO
	22	classified in accordance with the Unified Soil Classification System.				
	23.	Simod Son Sideomodien System.				
	24					
			PROJE	CT: BARA	TARIA	HOLÉ NUMBER: EMVC-02-23

				_			HOLE NO. EMVC-02-
DRILI	LING LO	G	DIVISION:	INSTALL			SHEET 1 of 1
1. PROJE	CT	BARA	TARIA		AND TYPE		
2. LOCA			or Station) 833632 Y=272138	11. DATUM FOR ELEVATION SHOWN ^(TBM or MSL) NAVD 88			
				12. MANUFACTURER'S DESIGNATION OF DRILL			
	3. DRILLING AGENCY: Eckerd College (As shown on drawing title and file number)			13. TOT I			P-3 Electric Vibracorer DEN SAMPLES TAKEN
4. HOLE N	NO. ' ' ' '		EMVC-02-27		Disturbed:	0 Undi	sturbed: 0
5. NAME	OF DRILLE	R (Gregg Brooks, PhD		AL NO. OF		
6. DIREC	TION OF HO			16. DATE	HOLE	Started	Completed
			VERTICAL	17. ELEV			2 15:58 DLE -16.5 FT
	NESS OF BU						RY FOR BORING 91 %
	DEPTH OF			19. SIGN.	ATURE OF	GEOLG	OGIST ML and JB
ELEV.	DEPTH	LEGEND	CLASSIFICATION OF MATER (Description)	RIALS	CORE REC %	SAMPLE	REMARKS
-16.5 -17.1	0	·:	SAND, fine grained, quartz, trace	silt, trace	+	1	Sample #1 Depth = 0.4 Mean (mm): 0.14, Phi Sorting: 0.75
	1-	///	shell hash, clay from 0'-0.1', oliv (5Y-4/2), (SW-SM).	e gray			Silt: 7.7% (SW-SM)
	रेगोगोगोगोगोगोगोगोगोगोगोगो २ ३ ४ ४ ५ ५ ६ ४ ४		CLAY, little sandy laminae, sof 3.2'-3.8' and 6.0'-6.8', olive gray ((CL).	t from 5Y-4/2),		2	Sample #2 Depth = 4.0 *Mean (mm): 0.008, Phi Sorting: 2.2 *Sand 9.7% Silt 61.3% Clay 29.1%
-24.1 -26.4	8 9 11 9		SAND, fine grained, quartz, tracc clayey sand layer @ 8.2', olive (5Y-5/2), (SP).	e silt, 1" e gray		3	Sample #3 Depth = 9.0 Mean (mm): 0.10, Phi Sorting: 0.66 Silt: 16.06% (SM)
-27.9	10 11 11 11 11		SANDY CLAY, clay layer from 11 dark gray (5Y-4/1), (CL).			4	Sample #4 Depth = 10.5 *Mean (mm): 0.025, Phi Sorting: 2.1 *Sand 42.7%, Silt 44.8%, Clay 12.5%
-30.7	12 13 13 13 14 14 14 14 14 14 14 14 14 14 14 14 14		CLAYEY SAND, quartz, 2" fine quartz sand layer @ 11.5', dari (5Y-4/1), (SC).	grained k gray		5	Sample #5 Depth = 13.0 Mean (mm): 0.08, Phi Sorting: 0.52 Silt: 46.19% (ML)
-32.3	15		SANDY CLAY, dark gray (5Y-4/	1), (CL).		4	
-33.7	16-1		CLAY, trace sandy laminae, dal (5Y-4/1), (CL).	rk gray		2	
-35.5	18 18		No Recovery				
	20		End of Boring				
	21 22 23 23 24		Note: 1) Soils are field visually classified in accordance with the Unified Soil Classification System.	PRO	JECT: BARA	TARIA	* Data Analyzed by UNO HOLE NUMBER: EMVC-02-27
				1 -40	JEGI. DARA	CONT	TOLE HOWIDER. EWVO-02-21

						HOLE NO. EMVC-02-
DRILL	ING LOG	DIVISION:	INSTALL	ATION:		SHEET 1 of 1
1. PROJE	CT BARA	ATARIA		AND TYPE		
2. LOCAT	(Coordinates		11. DATUM FOR ELEVATION SHOWN (TBM or MSL) NAVD 88			
	X=3	835271 Y=270842	12. MANUFACTURER'S DESIGNATION OF DRILL			
3. DRILLING AGENCY: Eckerd College (As shown on drawing title and file number)			12 TOT N			P-3 Electric Vibracorer DEN SAMPLES TAKEN
4. HOLE N	10. (AS SHOWN ON	EMVC-02-29				isturbed: 0
5. NAME	OF DRILLER			L NO. OF		
	TION OF HOLE	Gregg Brooks, PhD	16. DATE	ATION GR	Started	Completed
- DIRECT	, ———	VERTICAL	17. ELEV			2 08:01 DLE -16.9 FT
	LESS OF BURDEN		18. TOTA	L CORE R	ECOVE	RY FOR BORING 89 %
	DRILLED INTO F DEPTH OF HOLE		19. SIGNA	ATURE OF	GEOLO	OGIST ML and JB
ELEV.	HT93D	CLASSIFICATION OF MATER (Description)	IALS	CORE REC %	SAMPLE	REMARKS
-16.9	0 - 7 7 7					
-18.7		CLAY, 1" silty sand layer with train hash from 0'-0.1', olive gray (5Y-4			1	Sample #1 Depth = 1.0 *Mean (mm): 0.008, Phi Sorting: 1.9 *Sand 6.5% Silt 65.1% Clay 28.4%
-19.9	2	SANDY SILT, olive gray (5Y-4/2), (ML).		2	Sample #2 Depth = 2.5 Mean (mm): 0.08, Phi Sorting: 0.57 Silt: 36.27% (SM)
00.5	11111111111111111111111111111111111111	Alternating CLAY and SILT lamining gray (5Y-4/2), (CL).	ae, olive		3	Sample #3 Depth = 4.5 *Mean (mm): 0.017, Phi Sorting: 2.4 *Sand 23.4% Silt 58.3% Clay 18.4%
-22.5 -24.2	6	SAND, fine to very fine grained, qu. silt, gray (5Y-5/1), (SP).	artz, trace		4	Sample #4 Depth = 6.5 Mean (mm): 0.16, Phi Sorting: 0.49 Silt: 2.59% (SP)
-28.4	8 11 9 10 11 11	SILTY SAND, quartz, trace organi gray (5Y-5/2), (SM).	cs, olive		5	Sample #5 Depth = 9.0 Mean (mm): 0.09, Phi Sorting: 0.5 Silt: 20.38% (SM)
-33.8	12 13 14 15 16 17 17 17 17 17 17 17 17 17 17 17 17 17	Alternating CLAY and SILT lamina gray (5Y-4/2), (CL).	ae, olive		3	
-35.9	18 -11	No Recovery				
	19-	End of Boring				
	21	Note: 1) Soils are field visually classified in accordance with the Unified Soil Classification System.				* Data Analyzed by UNO
		·	PROJ	ECT: BARA	TARIA	HOLE NUMBER: EMVC-02-29

						HOLE NO. EMVC-02-	
DRILL	ING LOG	DIVISION:	INSTALLA	TION:		SHEET 1 of 1	
1. PROJECT BARATARIA			10. SIZE AND TYPE OF BIT 3"				
2. LOCAT	11. DATUN	11. DATUM FOR ELEVATION SHOWN (TBM or MSL) NAVD 88					
3. DRILLIN	12. MANUFACTURER'S DESIGNATION OF DRILL Rossfelder P-3 Electric Vibracorer						
4. HOLE N		13. TOT NO. OF OVERBURDEN SAMPLES TAKEN					
	Disturbed: 0 Undisturbed: 0 14. TOTAL NO. OF CORE BOXES 1						
5. NAME C		15. ELEVATION GROUND WATER					
6. DIRECTION OF HOLE VERTICAL			16. DATE HOLE Started Completed 09/15/02 08:50				
7. THICKN		17. ELEVATION TOP OF HOLE -17.5 FT 18. TOTAL CORE RECOVERY FOR BORING 97 %					
8. DEPTH	19. SIGNATURE OF GEOLOGIST ML and JB						
9. TOTAL DEPTH OF HOLE 19.0 FT							
ELEV.	DEPTH HT93D	CLASSIFICATION OF MATER (Description)	RIALS	CORE REC %	SAMPLE	REMARKS	
-17.5	0-1111	SAND, very fine grained, quartz,	little silt.		1		
-18.2 -18.8	<u> </u>	trace shell hash, 1" clay pocket @ dark gray (5Y-3/1), (SW-SI	0.1', very	_	2	Occupie #4 Danib 4 7	
-18.8	· Ĭíníí	CLAY, olive gray (5Y-4/2), (CL).		1	Sample #1 Depth = 1.7 Mean (mm): 0.09, Phi Sorting: 0.68	
- 19.0	2 -71111	SAND, very fine grained, quartz, trace shell hash, dark gray (5)	little silt, (-4/1),		- 2	Silt: 28.12% (SM)	
	3=	(SW-SM). CLAY, olive gray (5Y-4/2), (CL).				
-26.7	3 4 5 6 7 8 8 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	SILT, very fine grained quartz SA CLAY mixture, olive gray (5Y-4/	.ND, and 2), (ML).		3	Sample #3 Depth = 5.0 *Mean (mm): 0.029, Phi Sorting: 1.6 *Sand 33.8%, Silt 56.1%, Clay 10.1%	
	10 July 11 July 12 July 13 July 14 July 15 July 16 July 17 July 17 July 18 Jul	CLAY, trace silty sand laminae, o (5Y-4/2), (CL).	olive gray		2	Sample #2 Depth = 15.0 *Mean (mm): 0.016, Phi Sorting: 2.6 *Sand 23.7%, Silt 55.4%, Clay 21.0%	
-36 -36.5	<u>₹///</u>	No Recovery					
	End of Boring						
	20 1 21 22 1 23 1 24 24 24 24 24 24 24 24 24 24 24 24 24	Note: 1) Soils are field visually classified in accordance with the Unified Soil Classification System.				* Data Analyzed by UNO	
-36 -36.5	20 21 22 22 22 22 22 23 24 25 25 25 25 25 25 25 25 25 25 25 25 25	End of Boring Note: 1) Soils are field visually classified in accordance with the		ECT: BARA	TARIA	* Data Analyzed by UNO HOLE NUMBER: EMV	